

CASE

NUMBER:

99.084

EXHIBIT "A"

U. S. DEPARTMENT OF COMMERCE
Economic Development Administration

Public Works and Development Facilities

Award No.: 04-01-04239

Recipient: Hickory Water District, Mayfield-Graves County Industrial Development Board and Local Development Corporation of Mayfield-Graves County

SPECIAL AWARD CONDITIONS

1. PROJECT DEVELOPMENT TIME SCHEDULE: The Recipient agrees to the following Project development time schedule:

Time allowed after Receipt of Financial Assistance Award for:

Return of Executed Financial Assistance Award..... 15 days
Start of Construction...12 Months from Date of Award of Grant
Construction Period..... 12 months

Project Closeout - All Project closeout documents including final financial information and any required program reports shall be submitted to the Government not more than 90 days after the date the Recipient accepts the completed project from the contractor(s).

The Recipient shall pursue diligently the development of the Project so as to ensure completion within this time schedule. Moreover, the Recipient shall notify the Government in writing of any event which could delay substantially the achievement of the Project within the prescribed time limits. The Recipient further acknowledges that failure to meet the development time schedule may result in the Government's taking action to terminate the Award in accordance with the regulations set forth at 15 CFR 24.43 (53 Fed. Reg. 8048-9, 8102, March 11, 1988).

2. GOALS FOR WOMEN AND MINORITIES IN CONSTRUCTION: Department of Labor regulations set forth in 41 CFR 60-4 establish goals and timetables for participation of minorities and women in the construction industry. These regulations apply to all Federally assisted construction contracts in excess of \$10,000. The Recipient shall comply with these regulations and shall obtain compliance with 41 CFR 60-4 from contractors and subcontractors employed in the completion of the Project by including such notices, clauses and provisions in the Solicitations for Offers or Bids as required by 41 CFR 60-4. The goal for the participation of women in each trade area shall be as follows:

From April 1, 1981, until further notice: 6.9 percent

Special Conditions
EXHIBIT "A"
Page 2

Award No. 04-01-04239

All changes to this goal, as published in the Federal Register in accordance with the Office of Federal Contract Compliance Programs regulations at 41 CFR 60-4.6, or any successor regulations, shall hereafter be incorporated by reference into these Special Award Conditions.

Goals for minority participation shall be as prescribed by Appendix B-80, Federal Register, Volume 45, No. 194, October 3, 1980, or subsequent publications. The Recipient shall include the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" (or cause them to be included, if appropriate) in all Federally assisted contracts and subcontracts. The goals and timetables for minority and female participation may not be less than those published pursuant to 41 CFR 60-4.6.

3. ENGINEERING CERTIFICATE/CERTIFICATE OF TITLE: The Recipient, prior to solicitation of bids for construction of this Project, shall furnish to the Government an acceptable Engineering Certificate showing all lands, rights-of-way and easements necessary for construction of this Project along with an acceptable Certificate of Title on said lands, rights-of-way and easements showing good and merchantable title free of mortgages or other foreclosable liens.
4. DISCLOSURE OF FEDERAL PARTICIPATION: No amount of this Award shall be used to finance the acquisition of goods or services (including construction services) for the Project unless the Recipient agrees to:
 - (a) specify in any announcement of the awarding of the contract for the procurement of the goods and services involved (including construction services) the amount of Federal funds that will be used to finance the acquisition; and
 - (b) express the amount announced pursuant to paragraph (a) as a percentage of the total cost of the planned acquisition.

The foregoing requirements shall not apply to a procurement for goods or services (including construction services) that has an aggregate value of less than \$500,000.

5. PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS: Recipients are hereby notified that they are encouraged, to the extent feasible, to purchase American-made equipment and products with funding provided under this program in accordance with Congressional intent as set forth in the resolution contained in Public Law 103-317, Sections 607 (a) and (b).

Special Conditions
EXHIBIT "A"
Page 3

Award No. 04-01-04239

6. **TITLE OPINION ON INDUSTRIAL PARK:** Prior to disbursement of grant funds, the Mayfield-Graves County Local Development Corporation and Industrial Development Board of Mayfield-Graves County shall provide an acceptable final title opinion showing that it is vested with fee simple title, free of mortgages or foreclosable liens, except a lien of \$295,000 to the T.V.A., to the approximate 190 acre industrial site to be served by this project.
7. **PROPERTY MANAGEMENT STANDARDS:** In affirming this Award, the Recipient acknowledges its responsibility to use the real property acquired or improved by this Award in accordance with Title 13 Code of Federal Regulation, Part 314 only for the authorized and specific purpose of an industrial park in order to sell, lease, or otherwise convey parcels of the improved property to serve that purpose. The sales agreements and deeds of conveyance shall include a covenant prohibiting the use of the property for any purpose other than the general and special purpose of the grant as approved. The instrument containing the covenant shall be recorded in accordance with the requirements of 13 CFR 314.6(c).

Since the authorized purpose of this grant is to develop land in order to sell, lease, or otherwise convey it for development facility use, such conveyance is approved provided it is consistent with the authorized purpose of the grant and with applicable EDA requirements concerning, but not limited to, nondiscrimination.

8. **PERFORMANCE MEASURES:** The Recipient acknowledges its responsibility to submit to the Economic Development Administration (EDA): (a) prior to final disbursement, the information identified as "Performance and outcomes at project completion", and (b) two years and four years thereafter, the information identified as "Project outcomes two years and four years after completion", set forth as Core Performance Measures in Addendum to EDA Standard Terms and Conditions, Attachment 1-A. EDA will advise the Recipient in writing, not less than 90 days prior to the time for submission, in the event there are any modifications in the information required to be submitted.
9. **ENVIRONMENTAL:** Prior to advertisement for bids, the Recipient shall furnish evidence satisfactory to the Government that the final plans and specifications have been reviewed and approved by the State Historic Preservation Officer (SHPO). The Recipient further agrees to be in complete compliance with Section 106 of the National Historic Preservation Act.



PAUL E. PATTON
GOVERNOR

JOHN P. McCARTY
CHAIRMAN

KENTUCKY INFRASTRUCTURE AUTHORITY

Finance and Administration Cabinet

702 Capitol Avenue

Suite 281, Capitol Annex

Frankfort, Kentucky 40601-3453

(502) 564-2090

Telefax (502) 564-7416

GORDON L. MULLIS, JR.
EXECUTIVE DIRECTOR

MARILYN EATON-THOMAS
SECRETARY/TREASURER

September 28, 1998

Robert Sullivan, Chairman
Hickory Water District
PO Box 128
Hickory, Kentucky 42051

**KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND
CONDITIONAL LOAN COMMITMENT B98-04**

Dear Chairman Sullivan:

The Kentucky Infrastructure Authority ("KIA") commends your efforts to promote economic development and improved public service facilities in your community. Your reapplication to the KIA for the construction of a 500,000 gallon water storage tank was approved by the Authority on September 1, 1998. The total cost of the project shall not exceed \$1,028,000 of which the KIA loan shall provide up to \$528,000. Other anticipated funding for the project is reflected in the Attachment A. The final loan amount will be equal to the KIA portion of estimated project amount applied to the actual project cost. Attachment A incorporated herein by reference fully describes the project.

A loan agreement will be executed between the Authority and the Hickory Water District upon satisfactory performance of the conditions set forth in this letter. A period of six (6) months from the date of this letter, March 28, 1999, will be allowed for you to meet the conditions and enter the loan agreement. **No additional extensions will be granted.** Funds will be available for disbursement only after execution of the loan agreement.

The loan agreement and this commitment shall be subject, but not limited to the following terms:

1. The KIA project loan shall not exceed \$528,000.
2. The loan shall bear interest at the rate of 1.8% per annum commencing with the first draw of funds.
3. The loan shall be repaid over a period of twenty (20) years from the date this loan is closed.

An Equal Opportunity Employer M/F/D

Printed on recycled paper

EXHIBIT F2

Page 1 Of 5

Chairman Robert Sullivan
September 28, 1998
Page Two

4. Interest shall be payable on the amount of actual funds received. The first payment shall be due on June 1 or December 1 immediately succeeding the date of the initial draw of funds, provided that if such June 1 or December 1 shall be less than three months since the date of the initial draw of funds, then the first interest payment date shall be the June 1 or December 1 which is at least six months from the date of the initial draw of funds. Interest payments will be due each six months thereafter until the loan is repaid.
5. Full principal payments will commence on June 1 or December 1 immediately succeeding the date of the last draw of funds, provided that if such June 1 or December 1 shall be less than three months since the date of the initial draw of funds, then the first principal payment date shall be the June 1 or December 1 which is at least six months from the date of the last draw of funds. Full payments will be due each six months thereafter until the loan is repaid.
6. A loan servicing fee of two-tenths of one percent of the annual outstanding loan balance shall be payable to the Authority as a part of each interest payment.
7. Annual revenues equaling ten percent of the annual debt service on this loan shall be set-aside in a repair and maintenance fund until such fund has a balance equal to five percent of the original loan amount.
8. Loan funds will be disbursed after execution of the loan agreement as project cost is incurred.
9. The final loan agreement must be approved by ordinance or resolution, as applicable, of the city council or appropriate governing board.
10. Prior to project closeout you shall provide documentation of the economic development benefits including jobs actually derived by the project as described in the attached description.

The following is a list of the standard conditions to be satisfied prior to execution of the loan agreement or incorporated in the loan agreement. Items 1 through 7 must be provided to the Department of Local Government ("DLG") and Items 8 through 9 shall be provided directly to the KIA.

1. Upon completion of final design of the facilities in the attached project description, favorable approval shall be obtained of such design by all appropriate parties as required by Kentucky statute or administrative regulation. Proof of approval must be sent to DLG.
2. DLG should be consulted prior to preparation of bidding specifications for guidance on federal or state requirements. One important point in this regard, is that projects funded by the Authority may or may not require payment of state prevailing wage rates. Legal counsel should be sought on this issue.

Chairman Robert Sullivan
September 28, 1998
Page Three

3. Applicant must provide to DLG a bid certification from their legal counsel stating that they have prepared construction specifications in accordance with all applicable state or federal wage rate laws, and that the bidding procedures used are in compliance with applicable federal and state law.
4. Documentation of final funding commitments from all parties other than the Authority as reflected in the Attachment A description shall be provided to DLG prior to pre-closing the Authority loan and disbursement of the loan moneys. Rejections of any anticipated project funding shall be immediately reported to DLG and may cause the loan to be subject to further consideration.
5. Proof of the commencement of construction of the related economic development facilities as described in the attachments hereto, shall be provided to DLG prior to award of construction contracts for the governmental agency infrastructure facilities financed with this loan.
6. Upon receipt of construction bids a tabulation of such bids and engineer's recommendations on compliance with bid specifications and recommendation for award, shall be forwarded to DLG for final approval. DLG shall provide information to the Authority for sizing of the loan.
- Ref 7. All easements or purchases of land shall be completed prior to commencement of construction and reported to DLG.
8. Based on the final "as bid" project budget the community must provide to the Authority satisfactory proof based on then existing conditions that the revenue projections in the attached descriptions are still obtainable and that projections of operating expenses have not materially changed.
9. Any required adjustment in utility service rates shall be adopted by ordinance or resolution, as applicable, by the city council or appropriate governing board and provided to the Authority. If required by applicable provisions of law, a public hearing on the proposed rate adjustment shall be held 30 days prior to the adoption of the service rate ordinance. Any required approvals by the Kentucky Public Service Commission shall be obtained.

The following is a list of the special conditions to be satisfied prior to execution of the loan agreement or incorporated in the loan agreement. Please provide the items to KIA for review and approval and copy DLG.

1. The loan must undergo review by the Capital Projects and Bond Oversight Committee of the Kentucky Legislature prior to the state's execution of the Assistance Agreement. The committee meets monthly on the third Tuesday. At this time we know of no further submission required for their review; however, they may request information as needed.

Chairman Robert Sullivan
September 28, 1998
Page Four

M. Sullivan
2.

The city must complete and return to KIA the attached "Authorization For Electronic Deposit of Vendor Payment" Form.

Please inform the Authority of any changes in your financing plan as soon as possible. We will assist you in a final evaluation of the financing plan when construction bids are available. We wish you every success for this project, which will benefit both your community and the Commonwealth as a whole.

Sincerely,


Gordon L. Mullis
Executive Director

Attachment

- c: Bob Chandler, Department for Local Government
- Dirk Bedarff, Peck, Shaffer & Williams, L.L.P.
- Lonnie Campbell, County & Municipal Accounting, DLG
- Tom Armstrong, State Local Debt Officer, DLG
- Henry Hodges, PeADD

Please sign and return a copy of this letter indicating your acceptance of this commitment and its terms.

_____ Accepted

_____ Date

C:\My Documents\WP\KIA\Hickory\WD-B.DOC

II. PROJECT BUDGET

Administration	\$ 7,500
Engineering Design	81,000
Engineering Inspection	19,000
Construction	868,400
Capitalized Interest	5,682
Miscellaneous Expenses	1,000
Contingencies	<u>45,418</u>
Total Project Cost	\$ 1,028,000

III. PROJECT FUNDING**A. Funding Sources**

KIA, Fund B	\$ 528,000
EDA Grant	<u>500,000</u>
Total Funding	\$ 1,028,000

The Economic Development Administration ("EDA") grant was approved April 23, 1997.

B. KIA Debt Service

Loan Size	\$ 528,000
Interest Rate	1.8%
Loan Term	20 years
Principal & Interest	\$ 31,554
Administrative Fee (0.2%)	1,056
Coverage for Maintenance (10% P&I)	<u>3,155</u>
Total Annual Debt Service	\$ 35,765

Justification of Hardship Interest Rate:

Median Family Income - Graves County	\$26,198
Median Family Income - Kentucky	\$27,028

CERTIFICATE AS TO PROJECT SITE, RIGHTS-OF-WAY AND EASEMENTS

Part One
Certificate of Engineer

I, the undersigned Engineer, certify that I am familiar with the design of the

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS
(Type of facility)

being constructed by the

HICKORY WATER DISTRICT

(Name of owner)

as part of EDA

Project Number AKY 0382 and that all of such facilities will be constructed wholly within the land and rights-of-way hereinafter described and existing public streets and roads. I further certify that the land and rights-of-way being purchased as hereinafter described in sufficient but not in excess of actual needs for the project as planned and approved by the Owner.

- 1. Fee Title will be required for the following property (all project elements which are to be constructed above ground should be on land owned in Fee. Describe each tract, whether presently owned or to be acquired, and indicate what project element is to be constructed thereon, i.e., tank site, pumping station, treatment plant, etc. - If more space is needed use additional sheets marked "Exhibit A):

TANK SITE - SEE ATTACHED LEGAL DESCRIPTION.

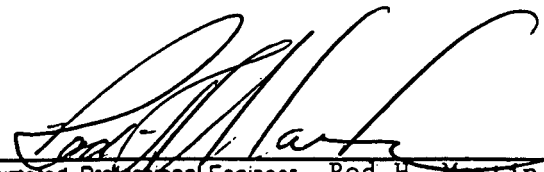
- 2. The following easements and rights-of-way will be required for this project. (Describe by courses and distances and by name of Owner, including area in acres, however, omit existing public streets and roads - if more space is needed use additional sheets marked "Exhibit B".)

SEE ATTACHED EASEMENTS.

- 3. The following railroad, highway or other permits (Describe location and name of permitter) will be required (if more space is needed use additional sheets marked "Exhibit C"):

NONE.

WITNESS MY HAND, this the 15TH day of SEPTEMBER 1998



Registered, Professional Engineer, Rod H. Martin

Telephone No. (502) 554-2737

3220 LONE OAK ROAD

Address

PADUCAH

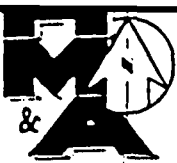
City

KY

State

42003

(TO BE COMPLETED BY ARCHITECT/ENGINEER AND FORWARDED TO OWNER'S ATTORNEY)



HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
(502) 554-2737 • FAX (502) 554-2738

ROD H. MARTIN, P.E. & S.
President
MICHAEL GARLAND
Vice President
NETTY J. GARLAND
Surveyor/Engineer

LEGAL DESCRIPTION

OF

1.000 ACRES

FOR

HICKORY WATER DISTRICT

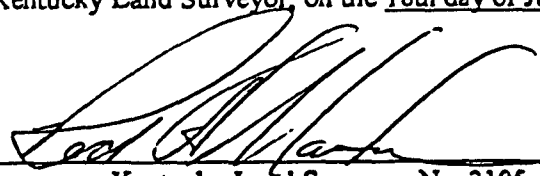
Lying North of a proposed County Road through the Mayfield-Graves County Local Development Corporation and Industrial Development Board of Mayfield-Graves County, Inc. property and West of U. S. Highway 45 and being part of the Mayfield-Graves County Local Development Corporation and Industrial Development Board of Mayfield-Graves County, Inc. property recorded in Deed Book 360, Page 87, Graves County Court Clerk's Office, Graves County, Kentucky, and more particularly bounded and described as follows to wit:

Beginning at a point in the North line of the Mayfield-Graves County Local Development Corporation and Industrial Development Board of Mayfield-Graves County, Inc. Tract 1 (155.2517 acres) per Deed Book 360, Page 87 that is S 85° 21' 48" W, 2,051.02 feet as measured along said North line from a 1½ inch iron pipe at the Northeast corner thereof and in the Westerly right-of-way line of U. S. Highway 45; THENCE FROM SAID POINT OF BEGINNING S 4° 38' 12" E, 248.91 feet to a ½ inch rebar with cap; thence S 85° 21' 48" W, 175.00 feet to a ½ inch rebar with cap; thence N 4° 38' 12" W, 248.91 feet to a ½ inch rebar with cap in the North line of aforesaid Mayfield-Graves County Local Development Corporation and Industrial Development Board of Mayfield-Graves County, Inc. Tract 1 (155.2517 acres); thence N 85° 21' 48" E with said North line 175.00 feet to a ½ inch rebar with cap, the point of beginning and containing 1.000 acres as shown on "Plat of Survey for Hickory Water District" prepared by Hunter Martin & Associates, Inc. dated June 18, 1998.

There is also included with this conveyance a 50 foot easement for ingress and egress lying on the North side of a proposed County Road through the Mayfield-Graves County Local Development Corporation and Industrial Development Board of Mayfield-Graves County, Inc. Tract 1 (155.2517 acres) per Deed Book 360, Page 87 and being 25 feet either side of the following described centerline:

Beginning at a point in the South line of the above-described 1.000 acre tract that is N 85° 21' 48" E, 25.00 feet as measured along said South line from the Southwest corner thereof, THENCE FROM SAID POINT OF BEGINNING S 4° 38' 12" E to a point in the North right-of-way line of a proposed County Road through the Mayfield-Graves County Local Development Corporation and Industrial Development Board of Mayfield-Graves County, Inc. Tract 1 (155.2517 acres) per deed Book 360, Page 87.

The above legal description was written by Rod H. Martin, Kentucky Land Surveyor, on the 18th day of June, 1998, and is correct to the best of my knowledge and belief.



Kentucky Land Surveyor No. 2105

JMG:dc

RIGHT-OF-WAY EASEMENT

RECEIVED JUL 27 1998
RECEIVED AUG 10 1998
Recorded Easement

KNOW ALL MEN BY THESE PRESENTS:

That in consideration of One Dollar (\$1.00) and other good and valuable consideration paid to:

MID-CONTINENT BAPTIST BIBLE COLLEGE

hereinafter referred to as the GRANTOR, by HICKORY WATER DISTRICT hereinafter referred to as the GRANTEE the receipt of which is hereby acknowledged, the GRANTOR does hereby grant, bargain, sell, transfer, and convey unto the GRANTEE, its successor and assigns, a perpetual easement with the right to erect, construct, install, and lay, and thereafter use, operate, inspect, repair, maintain, replace, and remove

WATER MAINS AND APPURTENANCES

over, across, and through the land of the GRANTOR situated in GRAVES County, State of KENTUCKY, whose source of title is recorded in DEED BOOK 305, PAGE 61, of the Graves County Court Clerk's Office said land being generally described as follows:

Lying and being on the EASTERLY side of U.S. HWY. 45 together with the right of ingress and egress over the adjacent lands of the GRANTOR, his successors and assigns, for the purpose of this easement.

The easement shall be 15' in width, the centerline of which is described as follows:

Running approximately parallel to the right-of-way of U.S. HWY. 45 across the entire road frontage and being as near as practical thereto (not less than 7.5' feet).

The consideration hereinabove recited shall constitute payment in full for any damages to the land of the GRANTOR, his successors and assigns, by reason of the installation, operation and maintenance of the structures or improvements referred to herein. The GRANTEE covenants to protect all shrubbery, trees, fences, drives, walks and other improvements and to maintain the easement in good repair so that no unreasonable damage will result.

The grant and other provisions of this easement shall constitute a covenant running with the land for the benefit of the GRANTEE, its successors and assigns.

IN WITNESS WHEREOF, the GRANTORS have executed this instrument this 17th day of July, 19 98.

(SEAL) David L. Justice
(SEAL) Larry Washburn

STATE OF KENTUCKY
COUNTY OF GRAVES

The foregoing Easement was signed and acknowledged before me by David L. Justice and Larry Washburn this 17th day of July, 19 98.

My Commission Expires: 04-15-99
Jeanette Roberts
Notary Public

THIS INSTRUMENT PREPARED BY:
[Signature]
Rod H. Martin, K.E.S. No. 2105

STATE OF KENTUCKY
COUNTY OF GRAVES, SCT

I, Glen Bruce, Clerk of the County in and for the State and County aforesaid do certify that this instrument was lodged in my office for record on the 6 day of August, 19 98, at 10:11 o'clock, and the same and the foregoing and this certificate have been duly recorded in Deed book 375, Page 837, in the Graves County Clerk's Office this the 6 day of August, 19 98.

GLEN BRUCE, CLERK
BY [Signature] DC



RECEIVED JUL 27 1998
MID-CONTINENT COLLEGE

99 Powell Rd. East • Mayfield, KY 42066 • (502) 247-8521 • 1-800-232-4662

Office of the President

July 17, 1998

Hickory Water District
% Mr. Robert H. Sullivan
1110 State Route 1276
Mayfield, KY 42066

re: **Right-of-Way Easement**

Dear Mr. Sullivan:

After talking with Mr. Jim Martin, CED, Executive Director, Mayfield-Graves County Local Development Corporation; visiting the site of the easement with Mr. Martin; receiving Mr. Martin's letter of July 15th; and in accordance with your phone call, I am writing upon the authorization of our Board of Trustees to indicate that we will provide the following easement with the conditions outlined below:

1. That the water line will comply with State regulations and be 2 feet from the fence and not nearer than 9 feet to the double row of trees parallel to the fence. This would leave 4 feet in which to bury the water pipeline. In other words, allow 2 feet clearance from the fence, 4 feet for the water line, and 9 feet to clear the roots and limbs of the trees or the 15 foot easement you requested. We prefer the water line to be nearer to the State boundary and away from the trees.
2. That the dirt and rocks must be returned to the trench, mounded, seeded, and after it settles, re-seeded if necessary so it will not sink down and leave a trench and look unsightly.
3. That the trees not be damaged with heavy equipment and, if so, they will be replaced.
4. That you show us how you plan to run the pipeline before work begins so it will not interfere with where we have to put a large, lighted College sign that will require a sizeable concrete foundation.
5. We would like to have the option of being allowed to clear the fence row and right-of-way on your property at the water tower so people will be better able to see the College sign.
6. That the Hickory Water District not allow any signs to be placed on the Hickory Water District frontage that would block the view of the Mid-Continent College sign on the high ground adjacent to the Water District.
7. That the water line be laid in such a manner that it will not interfere with our sewer line being connected to the proposed sewer pumping station.

Thank you for your call, cooperation, and assistance. We want to partner with you, the Development Corporation, and others to improve this end of the city.

Sincerely Yours,

David L. Jester

David L. Jester, Ed.D., CFRE
DLJ/jr

A FULLY ACCREDITED COLLEGE IN THE HEARTLAND OF AMERICA

RIGHT-OF-WAY EASEMENT

KNOW ALL MEN BY THESE PRESENTS:

That in consideration of One Dollar (\$1.00) and other good and valuable consideration paid to:

CLOIS GENE AND CAROLETTA E. MAY

hereinafter referred to as the GRANTOR, by HICKORY WATER DISTRICT hereinafter referred to as the GRANTEE the receipt of which is hereby acknowledged, the GRANTOR does hereby grant, bargain, sell, transfer, and convey unto the GRANTEE, its successor and assigns, a perpetual easement with the right to erect, construct, install, and lay, and thereafter use, operate, inspect, repair, maintain, replace, and remove

WATER MAINS AND APPURTENANCES

over, across, and through the land of the GRANTOR situated in GRAVES County, State of KENTUCKY, whose source of title is recorded in DEED BOOK 364, PAGE 241, of the Graves County Court Clerk's Office, said land being generally described as follows:

Lying and being on the EASTERLY side of U.S. HWY. 45 together with the right of ingress and egress over the adjacent lands of the GRANTOR, his successors and assigns, for the purpose of this easement.

The easement shall be 15' in width, the centerline of which is described as follows:

Running approximately parallel to the right-of-way of U.S. HWY. 45 across the entire road frontage and being as near as practical thereto (not less than 7.5 feet).

The consideration hereinabove recited shall constitute payment in full for any damages to the land of the GRANTOR, his successors and assigns, by reason of the installation, operation and maintenance of the structures or improvements referred to herein. The GRANTEE covenants to protect all shrubbery, trees, fences, drives, walks and other improvements and to maintain the easement in good repair so that no unreasonable damage will result.

The grant and other provisions of this easement shall constitute a covenant running with the land for the benefit of the GRANTEE, its successors and assigns.

IN WITNESS WHEREOF, the GRANTORS have executed this instrument this 21 day of July, 1998.

(SEAL) Gene May
(SEAL) _____

STATE OF KENTUCKY
COUNTY OF GRAVES

The foregoing Easement was signed and acknowledged before me by Gene May this 21 day of July, 1998.

My Commission Expires: 4-20-00 Joyce Carol Barnett
Notary Public

THIS INSTRUMENT PREPARED BY:
Rod H. Martin
Rod H. Martin, K.L.S. No. 2103

STATE OF KENTUCKY
COUNTY OF GRAVES, SCT

I, Glen Bruce, Clerk of the County in and for the State and County aforesaid do certify that this instrument was lodged in my office for record on the 6 day of August, 1998, at 10:13 O'clock, and the same and the foregoing and this certificate have been duly recorded in Deed Book 375, Page 240, in the Graves County Clerk's Office this the 6 day of August, 1998.

GLEN BRUCE, CLERK
BY G. Corey DC

RIGHT-OF-WAY EASEMENT

KNOW ALL MEN BY THESE PRESENTS:

That in consideration of One Dollar (\$1.00) and other good and valuable consideration paid to:

VIOLA G. EAVES

hereinafter referred to as the GRANTOR, by HICKORY WATER DISTRICT hereinafter referred to as the GRANTEE the receipt of which is hereby acknowledged, the GRANTOR does hereby grant, bargain, sell, transfer, and convey unto the GRANTEE, its successor and assigns, a perpetual easement with the right to erect, construct, install, and lay, and thereafter use, operate, inspect, repair, maintain, replace, and remove

WATER MAINS AND APPURTENANCES

over, across, and through the land of the GRANTOR situated in GRAVES County, State of KENTUCKY, whose source of title is recorded in DEED BOOK 336, PAGE 342, of the Graves County Court Clerk's Office said land being generally described as follows:

Lying and being on the EASTERLY side of U.S. HWY. 45 together with the right of ingress and egress over the adjacent lands of the GRANTOR, his successors and assigns, for the purpose of this easement.

The easement shall be 15' in width, the centerline of which is described as follows:

Running approximately parallel to the right-of-way of U.S. HWY. 45 across the entire road frontage and being as near as practical thereto (not less than 7.5' feet).

The consideration hereinabove recited shall constitute payment in full for any damages to the land of the GRANTOR, his successors and assigns, by reason of the installation, operation and maintenance of the structures or improvements referred to herein. The GRANTEE covenants to protect all shrubbery, trees, fences, drives, walks and other improvements and to maintain the easement in good repair so that no unreasonable damage will result.

The grant and other provisions of this easement shall constitute a covenant running with the land for the benefit of the GRANTEE, its successors and assigns.

IN WITNESS WHEREOF, the GRANTORS have executed this instrument this _____ day of _____, 19 98.

(SEAL) Viola G. Eaves
(SEAL) _____

STATE OF KENTUCKY
COUNTY OF GRAVES

The foregoing Easement was signed and acknowledged before me by Viola G. Eaves this 12th day of June, 19 98.

My Commission Expires: 3-13-02

Debbie L. Buchanan
Notary Public

THIS INSTRUMENT PREPARED BY:

Rod H. Martin
Rod H. Martin, R.L.S. No. 2103

STATE OF KENTUCKY
COUNTY OF GRAVES, SCT

I, Glen Bruce, Clerk of the County in and for the State and County aforesaid do certify that this instrument was lodged in my office for record on the 6 day of August, 19 98, at 10:14 O'clock, and the same and the foregoing and this certificate have been duly recorded in Deed Book 375 Page 841, in the Graves County Clerk's Office this the 6 day of August, 19 98.

GLEN BRUCE, CLERK
BY [Signature] DC

RIGHT-OF-WAY EASEMENT

RECEIVED AUG 10 1998
Recorded Easement

R.

KNOW ALL MEN BY THESE PRESENTS:

That in consideration of One Dollar (\$1.00) and other good and valuable consideration paid to:

AIR RELIEF, INC.

hereinafter referred to as the GRANTOR by HICKORY WATER DISTRICT hereinafter referred to as the GRANTEE the receipt of which is hereby acknowledged, the GRANTOR does hereby grant, bargain, sell, transfer, and convey unto the GRANTEE, its successor and assigns, a perpetual easement with the right to erect, construct, install, and lay, and thereafter use, operate, inspect, repair, maintain, replace, and remove

WATER MAINS AND APPURTENANCES

over, across, and through the land of the GRANTOR situated in GRAVES County, State of KENTUCKY, whose source of title is recorded in DEED BOOK 315, PAGE 517, of the Graves County Court Clerk's Office, said land being generally described as follows:

Lying and being on the EASTERLY side of U.S. HWY. 45 together with the right of ingress and egress over the adjacent lands of the GRANTOR, his successors and assigns, for the purpose of this easement.

The easement shall be 15' in width, the centerline of which is described as follows:

Running approximately parallel to the right-of-way of U.S. HWY. 45 across the entire road frontage and being as near as practical thereto (not less than 107.5 feet).

The consideration hereinabove recited shall constitute payment in full for any damages to the land of the GRANTOR, his successors and assigns, by reason of the installation, operation and maintenance of the structures or improvements referred to herein. The GRANTEE covenants to protect all shrubbery, trees, fences, drives, walks and other improvements and to maintain the easement in good repair so that no unreasonable damage will result.

The grant and other provisions of this easement shall constitute a covenant running with the land for the benefit of the GRANTEE, its successors and assigns.

IN WITNESS WHEREOF, the GRANTORS have executed this instrument this 9 day of July, 1998.

(SEAL) [Signature]
(SEAL) Jina Blalock

STATE OF KENTUCKY
COUNTY OF GRAVES

The foregoing Easement was signed and acknowledged before me by Jina Blalock this 9 day of July, 1998.

My Commission Expires: _____
Jina Blalock
Notary Public

THIS INSTRUMENT PREPARED BY:
[Signature]
Rod H. Martin, P.C.S. No. 2105

STATE OF KENTUCKY
COUNTY OF GRAVES, SCT

I, Glen Bruce, Clerk of the County in and for the State and County aforesaid do certify that this instrument was lodged in my office for record on the 10 day of August, 1998, at 10:12 o'clock, and the same and the foregoing and this certificate have been duly recorded in Deed book 375, Page 239, in the Graves County Clerk's Office this the 10 day of August, 1998.

GLEN BRUCE, CLERK
BY [Signature] DC



90000 SERIES
10% P.C.W.

G

HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

WATER SYSTEM IMPROVEMENTS
PROJECT COSTS
(After Bidding)

CONSTRUCTION COSTS:	Quantity	Units	Unit Cost	Subtotal	TOTAL	EDA SHARE 53.94%	KIA SHARE 46.06%	Check Column
CONTRACT A (New):								
MOBILIZATION/DEMOBILIZATION	1	LS	\$6,000.00	\$6,000.00				
WATER MAINS, PVC								
12" SDR 21	9,200	LF	\$8.70	\$80,040.00				
8" SDR 21	250	LF	\$6.00	\$1,500.00				
6" SDR 21	100	LF	\$4.00	\$400.00				
FITTINGS								
Ductile Iron, 12" Size	4,850	LBS.	\$2.00	\$9,700.00				
Ductile Iron, 8" Size	300	LBS.	\$2.00	\$600.00				
Ductile Iron, 6" Size	300	LBS.	\$2.00	\$600.00				
VALVES, W/IRON BOX								
12" Gate	5	EA.	\$985.00	\$4,925.00				
8" Gate	2	EA.	\$560.00	\$1,120.00				
6" Gate	9	EA.	\$380.00	\$3,420.00				
SPECIAL FITTINGS, TAPPING TEE								
12" x 12" x 12" W/12" Valve	1	EA.	\$3,310.00	\$3,310.00				
CLAMPS AND COUPLINGS								
12"	2	EA.	\$90.00	\$180.00				
TIE-INS								
Tank	1	EA.	\$400.00	\$400.00				
12"	1	EA.	\$400.00	\$400.00				
8"	1	EA.	\$375.00	\$375.00				
FIRE HYDRANTS	6	EA.	\$950.00	\$5,700.00				
AIR RELEASE VALVES W/BOX	1	EA.	\$550.00	\$550.00				
BORE W/CASING								
18" Casing	120	LF	\$75.00	\$9,000.00				
CRUSHED STONE	100	CY	\$17.00	\$1,700.00				
CONCRETE ENCASEMENT	20	LF	\$40.00	\$800.00				
ASPHALT PAVEMENT REPLACEMENT	20	SY	\$15.00	\$300.00				
CONCRETE PAVEMENT REPLACEMENT	4	CY	\$120.00	\$480.00				
ELEVATED TANK GENERAL	1	LS	\$21,760.00	\$21,760.00				
CHECK VALVE REMOVAL	1	LS	\$1,200.00	\$1,200.00				
LOWES MASTER METER	1	LS	\$20,800.00	\$20,800.00				
TREATMENT BUILDING ADDITION								
Building Improvements	1	LS	\$31,200.00	\$31,200.00				
Pumps	1	LS	\$9,250.00	\$9,250.00				
Electrical	1	LS	\$13,350.00	\$13,350.00				
Pipe and Valves	1	LS	\$10,000.00	\$10,000.00				
Site Work and Parking Area	1	LS	\$1,000.00	\$1,000.00				
Miscellaneous	1	LS.	\$500.00	\$500.00				

HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

WATER SYSTEM IMPROVEMENTS
PROJECT COSTS
(After Bidding)

ADMINISTRATIVE	1	LS	\$7,500.00	\$7,500.00	\$4,045.39	\$3,454.61	\$7,500.00
LAND, STRUCTURES, R.O.W., APPRAISALS	1	LS	\$500.00	\$500.00	\$269.69	\$230.31	\$500.00
RELOCATION EXPENSES & PAYMENTS	1	LS	\$500.00	\$500.00	\$269.69	\$230.31	\$500.00
CONTINGENCIES	4.4163%	Proj (Less Prev. Work)	\$40,938.24	\$40,938.24	\$22,081.51	\$18,856.73	\$40,938.24
TOTAL PROJECT COSTS				\$1,028,000.00	\$500,000.00	\$528,000.00	\$1,028,000.00
SUMMARY (Including Previous Work)							
Amount				\$1,028,000.00	\$500,000.00	\$528,000.00	\$1,028,000.00
Per Cent Of Project Funding (Excl. Prior Work)					53.94%	46.06%	

 90000 SERIES
10% P.C.W.

H

HICKORY WATER DISTRICT
Graves County, Kentucky

Summary Of Revenue & Expenses
PROFORMA CALCULATIONS

	YEAR ENDING DECEMBER 1997	ADJ	REF	PROFOMA PERIOD	AMOUNT
OPERATING REVENUE:					
Water Sales	\$237,238.00	\$15,521.07	(1)		\$252,759.07
Miscellaneous Service Revenue	\$0.00				\$0.00
SUBTOTAL - OPERATING REVENUE	\$237,238.00				\$252,759.07
OPERATING EXPENSES:					
Purchased Power	\$18,950.00	\$4,860.00	(2)		\$23,810.00
Chemicals	\$11,994.00				\$12,000.00
Materials and Supplies	\$11,909.00				\$11,909.00
Contractual Services	\$105,543.00				\$105,543.00
Rents	\$0.00				\$0.00
Insurance	\$2,878.00				\$2,878.00
Miscellaneous Expenses	\$1,491.00				\$1,491.00
Regulatory Commission Expense	\$291.00				\$291.00
Depreciation	\$56,522.00	\$19,416.50	(3)		\$75,938.50
Other Taxes	\$0.00				\$0.00
SUBTOTAL - OPERATING EXPENSE	\$209,578.00				\$233,860.50
OPERATING INCOME	\$27,660.00				\$18,898.57
OTHER INCOME (EXPENSE)					
Interest Income	\$6,862.00				\$6,862.00
Interest - Long Term Debt	(\$25,267.00)	(\$3,818.00)	(4)		(\$29,085.00)
SUBTOTAL - OTHER INCOME (EXPENSE)	(\$18,405.00)				(\$22,223.00)
NET INCOME (LOSS)	\$9,255.00				(\$3,324.44)

HICKORY WATER DISTRICT
Graves County, Kentucky

Summary Of Revenue & Expenses
PROFORMA NOTES

Number	Description	
1.	Adjustment of Revenue Generated reported in the Financial Report with the amount calculated from the billing analysis for the Year Ending 8/98.	
	Billing Analysis	\$252,759.07
	Financial Statement	<u>\$237,238.00</u>
	Net Adjustment	<u>\$15,521.07</u>
2.	Adjustment for Purchased Power due to increased pumping cost from new High Service Pump.	
	0.75 kw/HP * 30 HP =	22.5 KW
	22.5 kw * 8Hrs/Day =	180 KWH
	180 KWH * 30 Days =	5,400 KWH/Mo.
	5,400 KWH/Mo. @ \$0.075 / KWH =	\$405.00
	\$405.0 / Mo. * 12 Months / Yr. =	\$4,860.00
	Net Adjustment	<u>\$4,860.00</u>
3.	Adjustment to Depreciation Schedule for abandoned items and new facilities put on line.	
	Exist. tank to be abandoned	From Records (\$550.00)
	New Elevated Tank	2.50% \$12,934.00
	Pumps, Piping & Electrical	5.00% \$2,965.00
	New Distribution Mains	2.00% \$3,250.00
	Building Additions	2.50% \$817.50
	Net Adjustment For Depreciation	<u>\$19,416.50</u>
4.	Adjustment to Interest for Longterm Debt	
	Proforma Interest	
	1996 Issue	\$13,425.00
	1982 Issue	\$5,100.00
	New Issue	<u>\$10,560.00</u>
	Subtotal - Interest Long Term	\$29,085.00
	Current Interest	<u>\$25,267.00</u>
	Subtotal - Adjustment	<u>\$3,818.00</u>

HICKORY WATER DISTRICT
Graves County, Kentucky

ANNUAL DEBT SERVICE REQUIREMENTS FOR PROPOSED LONG TERM DEBT

Proposed Annual Debt Service - 1999 Issue (\$528,000)				
2.00% For 20 Years				
Year				
Ending	Balance	Principal	Interest	Total
1999	\$528,000.00	\$21,730.75	\$10,560.00	\$32,290.75
2000	\$506,269.25	\$22,165.36	\$10,125.39	\$32,290.75
2001	\$484,103.89	\$22,608.67	\$9,682.08	\$32,290.75
2002	\$461,495.22	\$23,060.84	\$9,229.90	\$32,290.75
2003	\$438,434.38	\$23,522.06	\$8,768.69	\$32,290.75
2004	\$414,912.32	\$23,992.50	\$8,298.25	\$32,290.75
2005	\$390,919.82	\$24,472.35	\$7,818.40	\$32,290.75
2006	\$366,447.47	\$24,961.80	\$7,328.95	\$32,290.75
2007	\$341,485.67	\$25,461.03	\$6,829.71	\$32,290.75
2008	\$316,024.64	\$25,970.25	\$6,320.49	\$32,290.75
2009	\$290,054.38	\$26,489.66	\$5,801.09	\$32,290.75
2010	\$263,564.72	\$27,019.45	\$5,271.29	\$32,290.75
2011	\$236,545.27	\$27,559.84	\$4,730.91	\$32,290.75
2012	\$208,985.43	\$28,111.04	\$4,179.71	\$32,290.75
2013	\$180,874.39	\$28,673.26	\$3,617.49	\$32,290.75
2014	\$152,201.13	\$29,246.72	\$3,044.02	\$32,290.75
2015	\$122,954.40	\$29,831.66	\$2,459.09	\$32,290.75
2016	\$93,122.75	\$30,428.29	\$1,862.45	\$32,290.75
2017	\$62,694.45	\$31,036.86	\$1,253.89	\$32,290.75
2018	\$31,657.60	\$31,657.60	\$633.15	\$32,290.75

HICKORY WATER DISTRICT
Graves County, Kentucky

**PROFORMA
REVENUE REQUIREMENTS PER PSC GUIDELINES**

	PROFORMA PERIOD
Operating Expenses	\$233,860.50
Average Annual Debt Service (3 Year Avg.)	
Existing P&I	\$61,683.33
KIA Loan 2% for 20 Years	\$32,290.75
20% Debt Service Coverage (KIA Only)	\$6,458.15
Subtotal - Annual Debt Service	\$100,432.23
TOTAL REVENUE REQUIREMENTS	\$334,292.73
Operating Revenue - Pro Forma	\$252,759.07
REQUIRED INCREASE IN REVENUE	\$81,533.67
WATER SALES:	
Water Sales From User Analysis	\$252,759.07
Required Increase In Revenue	\$81,533.67
AMOUNT REQUIRED FROM WATER SALES	\$334,292.73

**HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY**

**FINAL ENGINEERING REPORT
(After Bidding)**

**1998 INDUSTRIAL PARK
WATER SYSTEM IMPROVEMENTS**

NOVEMBER, 1998

BOARD OF COMMISSIONERS:

Robert H. Sullivan, Chairman
Tommy C. Green, Secretary
Sam E. Davis, Treasurer

CONSULTING ENGINEER

Hunter Martin & Associates, Inc.
3220 Lone Oak Road
Paducah, KY. 42003

SET NO. _____

EDA PROJECT NO. AKY 0382

**EXHIBIT II
Page 1 Of 24**

**HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY**

**FINAL ENGINEERING REPORT
(After Bidding)**

**1998 INDUSTRIAL PARK
WATER SYSTEM IMPROVEMENTS**

TABLE OF CONTENTS

TITLE	PAGE NUMBER
PREFACE:	4
CONTRACT A:	4
CONTRACT B:	4
PROJECT COSTS (AFTER BIDDING)	6
1. GEOGRAPHY AND POPULATION OF GRAVES COUNTY:	9
1.1. GEOGRAPHY	9
1.2. POPULATION	9
2. HICKORY WATER DISTRICT - GENERAL INFORMATION:	9
2.1. FORMATION AND ORGANIZATION	9
2.2. CUSTOMER BASE	12
3. FINANCIAL CONDITION OF WATER DISTRICT:	12
3.1. CURRENT INDEBTEDNESS	12
3.2. ANNUAL REVENUES AND EXPENSES	12
3.3. CURRENT RATES	16
4. SYSTEM INVENTORY:	17
4.1. SUPPLY	17
4.2. DISTRIBUTION SYSTEM	17
4.3. PUMPING FACILITIES	17
4.4. STORAGE FACILITIES	17
5. FLOWS:	18
6. SYSTEM DEFICIENCIES:	19
6.1. DISTRIBUTION FACILITIES	19
6.2. PUMPING FACILITIES	19
6.3. STORAGE FACILITIES	19
7. LONG RANGE PLAN:	19
8. PROPOSED IMPROVEMENTS:	20
9. PROJECT IMPLEMENTATION:	21
10. PROJECT COSTS:	21

11. SOURCE OF FUNDING:..... 21

12. CONSTRUCTION PROBLEMS:..... 21

13. ENVIRONMENTAL EFFECTS:..... 21

14. CONCLUSIONS AND RECOMMENDATIONS:..... 24

LIST OF TABLES

TITLE	PAGE NUMBER
TABLE 1 GRAVES COUNTY, KENTUCKY POPULATION PROJECTIONS.....	9
TABLE 2 HICKORY WATER DISTRICT ANNUAL USAGE AND REVENUE FOR TEST YEAR ENDING JANUARY, 1996.....	13
TABLE 3 HICKORY WATER DISTRICT SUMMARY OF ANNUAL DEBT SERVICE REQUIREMENTS.....	14
TABLE 4 HICKORY WATER DISTRICT SUMMARY OF REVENUES AND EXPENSES 1991 - 1995.....	15
TABLE 5 HICKORY WATER DISTRICT CURRENT RATES.....	16
TABLE 6 HICKORY WATER DISTRICT ANALYSIS OF REVENUE REQUIREMENTS.....	16
TABLE 7 HICKORY WATER DISTRICT SUMMARY OF STORAGE FACILITIES.....	17
TABLE 8 HICKORY WATER DISTRICT FLOWS FOR EXISTING USERS.....	18
TABLE 9 HICKORY WATER DISTRICT RECORD OF WATER PRODUCED - 1995.....	18
TABLE 10 HICKORY WATER DISTRICT PRELIMINARY PROJECT COSTS.....	23

LIST OF FIGURES

TITLE	PAGE NUMBER
FIGURE 1 GENERAL LOCATION MAP KENTUCKY COUNTIES.....	10
FIGURE 2 OVERALL SYSTEM MAP HICKORY WATER DISTRICT.....	11
FIGURE 3 PROPOSED IMPROVEMENTS HICKORY WATER DISTRICT.....	22

PREFACE:

On October 16, 1998, Hickory Water District received and opened Bids for Contracts A and B of the 1998 Industrial Park Water System Improvements. These improvements are to be financed by an EDA Grant and a loan through Kentucky Infrastructure Authority. The bids received are outlined as follows:

Contract A:

Nine Bids were received on Contract A with the Low Bidder being Burgess Construction, Eddyville, KY, with a Low Bid in the amount of \$276,260.00

All Bids were checked to determine if they were responsive and responsible and a Bid Tabulation was completed and distributed to all Bidders, the District and the Public Service Commission.

The Engineer is familiar with the Contractor from two previous projects. He has sufficient equipment to do the work; has the expertise for this type work; and has done work on other projects of similar nature. He successfully completed all projects that the Engineer is familiar with.

The Contractor is satisfied with his Bid in relation to other Bids and there should be no problem with bonding.

The District has authorized the issuance of the Notice of Award (Subject to Public Service Commission Approval) to Burgess Construction in the amount of \$276,260.00.

Contract B:

Three bids were received on Contract B with the Low Bidder being Caldwell Tanks, Inc., Huntington, Indiana, with a Low Bid in the amount of \$495,600.00.

All Bids were checked to determine if they were responsive and responsible and a Bid Tabulation was completed and distributed to all Bidders, the District and the Public Service Commission.

The Engineer is familiar with the Contractor from several previous projects. The District also has experience with the Contractor on a previous project. The Contractor has sufficient equipment to do the work and has the expertise for this type work.

The Contractor is satisfied with his Bid in relation to other Bids and there should be no problem with bonding.


The District has authorized the issuance of the Notice of Award (Subject to Public Service Commission Approval) to Caldwell Tanks, Inc. in the amount of \$495,600.00.

The table on the following pages shows the updated Project Cost and Source of Funds for these improvements.

This Final Engineering Report has been prepared by updating the original Preliminary Engineering Report to show the actual Construction Costs and Project Costs to date as shown for the Bids received.

Respectfully submitted,

HUNTER MARTIN & ASSOCIATES, INC


Rod H. Martin, P.E.

HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

WATER SYSTEM IMPROVEMENTS
PROJECT COSTS
(After Bidding)

CONSTRUCTION COSTS:	Quantity	Units	Unit Cost	Subtotal	TOTAL	EDA SHARE 53.94%	KIA SHARE 46.06%	Check Column
CONTRACT A (New):								
MOBILIZATION/DEMOBILIZATION	1	LS	\$6,000.00	\$6,000.00				
WATER MAINS, PVC								
12" SDR 21	9,200	LF	\$8.70	\$80,040.00				
8" SDR 21	250	LF	\$6.00	\$1,500.00				
6" SDR 21	100	LF	\$4.00	\$400.00				
FITTINGS								
Ductile Iron, 12" Size	4,850	LBS.	\$2.00	\$9,700.00				
Ductile Iron, 8" Size	300	LBS.	\$2.00	\$600.00				
Ductile Iron, 6" Size	300	LBS.	\$2.00	\$600.00				
VALVES, W/IRON BOX								
12" Gate	5	E.A.	\$985.00	\$4,925.00				
8" Gate	2	E.A.	\$560.00	\$1,120.00				
6" Gate	9	E.A.	\$380.00	\$3,420.00				
SPECIAL FITTINGS, TAPPING TEE								
12" x 12" x 12" W/12" Valve	1	E.A.	\$3,310.00	\$3,310.00				
CLAMPS AND COUPLINGS								
12"	2	E.A.	\$90.00	\$180.00				
TIE-INS								
Tank	1	E.A.	\$400.00	\$400.00				
12"	1	E.A.	\$400.00	\$400.00				
8"	1	E.A.	\$375.00	\$375.00				
FIRE HYDRANTS	6	E.A.	\$950.00	\$5,700.00				
AIR RELEASE VALVES W/BOX	1	E.A.	\$550.00	\$550.00				
BORE W/CASING								
18" Casing	120	LF	\$75.00	\$9,000.00				
CRUSHED STONE	100	CY	\$17.00	\$1,700.00				
CONCRETE ENCASEMENT	20	LF	\$40.00	\$800.00				
ASPHALT PAVEMENT REPLACEMENT	20	SY	\$15.00	\$300.00				
CONCRETE PAVEMENT REPLACEMENT	4	CY	\$120.00	\$480.00				
ELEVATED TANK GENERAL	1	LS	\$21,760.00	\$21,760.00				
CHECK VALVE REMOVAL	1	LS	\$1,200.00	\$1,200.00				
LOWES MASTER METER	1	LS	\$20,800.00	\$20,800.00				
TREATMENT BUILDING ADDITION								
Building Improvements	1	LS	\$31,200.00	\$31,200.00				
Pumps	1	LS	\$9,250.00	\$9,250.00				
Electrical	1	LS	\$13,350.00	\$13,350.00				
Pipe and Valves	1	LS	\$10,000.00	\$10,000.00				
Site Work and Parking Area	1	LS	\$1,000.00	\$1,000.00				
Miscellaneous	1	LS.	\$500.00	\$500.00				

HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

WATER SYSTEM IMPROVEMENTS
PROJECT COSTS
(After Bidding)

ADMINISTRATIVE	1	LS	\$7,500.00	\$7,500.00	\$4,045.39	\$3,454.61	\$7,500.00
LAND, STRUCTURES, R.O.W., APPRAISALS	1	LS	\$500.00	\$500.00	\$269.69	\$230.31	\$500.00
RELOCATION EXPENSES & PAYMENTS	1	LS	\$500.00	\$500.00	\$269.69	\$230.31	\$500.00
CONTINGENCIES	4.4163%	Proj (Less Prev. Work)	---	\$40,938.24	\$22,081.51	\$18,856.73	\$40,938.24
TOTAL PROJECT COSTS				\$1,028,000.00	\$500,000.00	\$528,000.00	\$1,028,000.00
SUMMARY (Including Previous Work)							
Amount				Total	EDA	KIA	
Per Cent Of Project Funding (Excl. Prior Work)				\$1,028,000.00	\$500,000.00	\$528,000.00	46.06%

1. GEOGRAPHY AND POPULATION OF GRAVES COUNTY:

1.1. Geography.

Graves County is located in the western part of Kentucky and is bounded on the South by the Kentucky - Tennessee State line. Marshall County and Calloway County lie to the East; McCracken County lies to the North; and Ballard County, Carlisle County, and Hickman County lie on the Western border. Graves County is the fifth largest County in the State of Kentucky with approximately 555 square miles or 355,200 acres of land area.

Figure 1 on Page 9 is a General Location Map showing Kentucky Counties and their relationship to Graves County.

1.2. Population.

Based on the 1990 Census, the population of Graves County was 33,550 persons. Mayfield, the County Seat, has the largest population in the County . Other cities within Graves County include Wingo, Pryorsburg, Symsonia, Farmington, Folsomdale, Lowes.

Population projections for Graves County are shown in the following table. This information is based on the University Of Louisville's publication "HOW MANY KENTUCKIANS: Population Forecasts 1990-2020", 1992 Edition. Projections are for "Moderate Growth" as defined in the publication.

**Table 1
GRAVES COUNTY, KENTUCKY
POPULATION PROJECTIONS**

	1970 Census	1980 Census	1990 Census	2000 Projection	2010 Projection	2020 Projection
GRAVES COUNTY	30,939	34,049	33,550	33,675	33,716	33,716

2. HICKORY WATER DISTRICT - GENERAL INFORMATION:

2.1. Formation And Organization.

Hickory Water District of Graves County, Kentucky was created by virtue of Chapter 74 of the Kentucky Revised Statutes, pursuant to a judgment of the County Court of Graves County, Kentucky, duly entered on September 11, 1964. The regulatory agencies for the District are the Public Service Commission and the Department For Environmental Protection, Division Of Water.

Hickory Water District serves the Northern portion of Graves County. The District extends from Mayfield on the South to the Graves County-McCracken County line on the North. Figure 2 on Page 11 is an overall map of the District's service area.

The post office address of the Water District is:

Hickory Water District
P. O. Box 128
Hickory, KY. 42051

The governing body of Hickory Water District consists of 3 Commissioners. The Commissioners are duly appointed by the County Judge Executive of Graves County with approval of the Fiscal Court. The present Commissioners are:

Robert H. Sullivan, Chairman
Tommy C. Green, Secretary
Sam E. Davis, Treasurer

2.2. Customer Base.

In 1995 Hickory Water District had approximately 1,149 customers. These customers are predominately rural single family users with the average usage running approximately 4,817 gallons per month. The largest single user is General Tire.

A user analysis for the test year ending January, 1995, was prepared and a summary of the analysis is shown in Table 2 on Page 13.

3. FINANCIAL CONDITION OF WATER DISTRICT:

3.1. Current Indebtedness.

The District has long-term debt consisting of two revenue bonds bearing 3.75% and 5.0% respectively. Table 3 on Page 14 is a summary of the Annual Debt Service Requirements for both loans.

3.2. Annual Revenues And Expenses.

Summaries of the annual revenues and expenses for the years ending December, 1991, through December, 1995, are presented in Table 4 on Page 15 for Hickory Water District. This information was taken from the Financial Reports which are prepared annually.

**Table 2
HICKORY WATER DISTRICT
Annual Usage And Revenue
For Test Year Ending January, 1996**

3/4" METERS				1" METERS			
Cutoff Range	Bills	Total Gallons Sold	Total Revenue	Cutoff Range	Bills	Total Gallons Sold	Total Revenue
2,000	3,401	3,632,482	\$22,106.50				
5,000	5,286	18,271,726	\$55,148.26	6,000	46	147,000	\$763.60
10,000	3,522	23,899,000	\$63,999.20	10,000	29	224,500	\$582.40
20,000	946	10,104,892	\$24,335.67	20,000	34	500,100	\$1,100.57
50,000	179	3,587,200	\$7,365.54	50,000	10	341,900	\$581.28
100,000	33	1,803,508	\$2,674.78	100,000	4	323,600	\$413.46
99,999,999	26	3,213,492	\$3,539.04	99,999,999	10	3,618,400	\$3,028.88
TOTAL	13,393	64,512,300	\$179,169.00	TOTAL	133	5,155,500	\$6,470.19
Average		4,817		Average		38,763	

1-1/2" METERS				2" METERS			
Cutoff Range	Bills	Total Gallons Sold	Total Revenue	Cutoff Range	Bills	Total Gallons Sold	Total Revenue
7,500	33	43,400	\$646.80				
10,000	9	80,100	\$201.60	15,000	48	199,900	\$1,576.80
20,000	0	0	\$0.00	20,000	1	18,800	\$39.12
50,000	40	1,465,000	\$2,442.00	50,000	15	441,400	\$786.18
100,000	21	1,414,800	\$1,929.18	100,000	14	1,150,200	\$1,462.07
99,999,999	5	798,800	\$807.16	99,999,999	37	8,773,500	\$7,976.65
TOTAL	108	3,802,100	\$6,026.74	TOTAL	115	10,583,800	\$11,840.82
Average				Average		92,033	

3" & 4" METERS				SUM			
Cutoff Range	Bills	Total Gallons Sold	Total Revenue	Cutoff Range	Bills	Total Gallons Sold	Total Revenue
				2,000	3,401	3,632,482	\$22,106.50
				5,000	5,286	18,271,726	\$55,148.26
				6,000	46	147,000	763.60
				7,500	33	43,400	646.80
				10,000	3560	24,203,600	64,783.20
				15,000	48	199,900	1,576.80
				20,000	981	10,623,792	25,475.36
				50,000	244	5,835,500	11,175.00
100,000	12	83,000	\$1,435.20	100,000	84	4,775,108	7,914.69
99,999,999	24	29,182,600	\$21,618.22	99,999,999	102	45,586,792	36,969.95
TOTAL	36	29,265,600	\$23,053.42	TOTAL	13,785	113,319,300	\$226,560.16
Average		812,933		Average	1,149	9,443,275	\$18,880.01

**Table 3
HICKORY WATER DISTRICT
SUMMARY OF ANNUAL DEBT SERVICE REQUIREMENTS**

Annual Debt Service - 1st Issue 3.75% For 40 Years				
Yr. End.	Balance	Principal	Interest	Total
1996	\$471,000.00			
1997	\$435,000.00	\$38,000.00	\$17,662.50	\$55,662.50
1998	\$397,000.00	\$39,000.00	\$16,312.50	\$55,312.50
1999	\$358,000.00	\$41,000.00	\$14,887.50	\$55,887.50
2000	\$317,000.00	\$42,000.00	\$13,425.00	\$55,425.00
2001	\$275,000.00	\$44,000.00	\$11,887.50	\$55,887.50
2002	\$231,000.00	\$45,000.00	\$10,312.50	\$55,312.50
2003	\$186,000.00	\$47,000.00	\$8,662.50	\$55,662.50
2004	\$139,000.00	\$49,000.00	\$6,975.00	\$55,975.00
2005	\$90,000.00	\$52,000.00	\$5,212.50	\$57,212.50
2006	\$38,000.00	\$38,000.00	\$3,375.00	\$41,375.00
2007	\$0.00			\$0.00

Annual Debt Service - 2nd Issue 5.00% For 40 Years				
1996	\$107,000.00			
1997	\$105,000.00	\$2,000.00	\$5,350.00	\$7,350.00
1998	\$103,000.00	\$2,500.00	\$5,250.00	\$7,750.00
1999	\$100,500.00	\$2,500.00	\$5,150.00	\$7,650.00
2000	\$98,000.00	\$2,500.00	\$5,025.00	\$7,525.00
2001	\$95,500.00	\$2,500.00	\$4,900.00	\$7,400.00
2002	\$93,000.00	\$3,000.00	\$4,775.00	\$7,775.00
2003	\$90,000.00	\$3,000.00	\$4,650.00	\$7,650.00
2004	\$87,000.00	\$3,000.00	\$4,500.00	\$7,500.00
2005	\$84,000.00	\$3,000.00	\$4,350.00	\$7,350.00
2006	\$81,000.00	\$3,000.00	\$4,200.00	\$7,200.00
2007	\$78,000.00	\$3,000.00	\$4,050.00	\$7,050.00
2008	\$75,000.00	\$4,000.00	\$3,900.00	\$7,900.00
2009	\$71,000.00	\$4,000.00	\$3,750.00	\$7,750.00
2010	\$67,000.00	\$4,000.00	\$3,550.00	\$7,550.00
2011	\$63,000.00	\$4,500.00	\$3,350.00	\$7,850.00
2012	\$58,500.00	\$4,500.00	\$3,150.00	\$7,650.00
2013	\$54,000.00	\$5,000.00	\$2,925.00	\$7,925.00
2014	\$49,000.00	\$5,000.00	\$2,700.00	\$7,700.00
2015	\$44,000.00	\$5,500.00	\$2,450.00	\$7,950.00
2016	\$38,500.00	\$5,500.00	\$2,200.00	\$7,700.00
2017	\$33,000.00	\$6,000.00	\$1,925.00	\$7,925.00
2018	\$27,000.00	\$6,500.00	\$1,650.00	\$8,150.00
2019	\$20,500.00	\$6,500.00	\$1,350.00	\$7,850.00
2020	\$14,000.00	\$7,000.00	\$1,025.00	\$8,025.00
2021	\$7,000.00	\$7,000.00	\$700.00	\$7,700.00
2022	\$0.00	\$7,000.00	\$350.00	\$7,350.00

**Table 4
HICKORY WATER DISTRICT
SUMMARY OF REVENUES AND EXPENSES
1991 - 1995**

	YEAR ENDING DECEMBER 1991	YEAR ENDING DECEMBER 1992	YEAR ENDING DECEMBER 1993	YEAR ENDING DECEMBER 1994	YEAR ENDING DECEMBER 1995
OPERATING REVENUE:					
Water Sales	\$207,304.00	\$219,625.00	\$219,226.00	\$223,926.00	\$226,553.00
Miscellaneous Service Revenue	\$4,241.00	\$4,539.00	\$4,855.00	\$4,781.00	\$5,491.00
SUBTOTAL - OPERATING REVENUE	\$211,545.00	\$224,164.00	\$224,081.00	\$228,707.00	\$232,044.00
OPERATING EXPENSES:					
Purchased Power	\$18,617.00	\$17,413.00	\$17,599.00	\$18,049.00	\$21,841.00
Chemicals	\$6,529.00	\$8,612.00	\$10,677.00	\$7,789.00	\$4,470.00
Materials and Supplies	\$9,548.00	\$6,333.00	\$7,761.00	\$15,291.00	\$11,825.00
Contractual Services	\$78,019.00	\$70,015.00	\$70,055.00	\$81,627.00	\$92,569.00
Rents	\$0.00	\$0.00	\$700.00	\$1,010.00	\$0.00
Insurance	\$1,481.00	\$1,509.00	\$1,689.00	\$1,503.00	\$1,909.00
Miscellaneous Expenses	\$1,391.00	\$1,655.00	\$1,563.00	\$1,678.00	\$1,383.00
Depreciation	\$48,630.00	\$47,013.00	\$48,039.00	\$49,101.00	\$54,792.00
Other Taxes	\$251.00	\$303.00	\$358.00	\$358.00	\$345.00
SUBTOTAL - OPERATING EXPENSE	\$164,466.00	\$152,853.00	\$158,441.00	\$176,406.00	\$189,134.00
OPERATING INCOME	\$47,079.00	\$71,311.00	\$65,640.00	\$52,301.00	\$42,910.00
OTHER INCOME (EXPENSE)					
Interest Income	\$4,392.00	\$6,169.00	\$6,511.00	\$6,348.00	\$6,696.00
Interest - Long Term Debt	(\$29,254.00)	(\$28,100.00)	(\$26,789.00)	(\$25,577.00)	(\$24,237.00)
SUBTOTAL - OTHER INCOME (EXPENSE)	(\$24,862.00)	(\$21,931.00)	(\$20,278.00)	(\$19,229.00)	(\$17,541.00)
NET INCOME (LOSS)	\$22,217.00	\$49,380.00	\$45,362.00	\$33,072.00	\$25,369.00

3.3. **Current Rates.**

The current rates and fees have been in effect since April 25, 1991 and are shown in Table 5.

**Table 5
HICKORY WATER DISTRICT
CURRENT RATES**

		BASIS OF CHARGE	3/4" Meters	1" Meter	1-1/2" Meter	2" Meter	3" & 4" Meter
First	2,000 Gallons	MINIMUM	\$6.50	--	--	--	--
First	6,000 Gallons	MINIMUM	--	\$16.60	--	--	--
First	7,500 Gallons	MINIMUM	--	--	\$19.60	--	--
First	15,000 Gallons	MINIMUM	--	--	--	\$32.85	--
First	100,000 Gallons	MINIMUM	--	--	--	--	\$119.60
Next	3,000 Gallons	/1000 GALS.	\$2.70	--	--	--	--
Next	2,500 Gallons	/1000 GALS.	--	--	\$2.00	--	--
Next	4,000 Gallons	/1000 GALS.	--	\$2.00	--	--	--
Next	5,000 Gallons	/1000 GALS.	\$2.00	--	--	\$1.65	--
Next	10,000 Gallons	/1000 GALS.	\$1.65	\$1.65	\$1.65	--	--
Next	30,000 Gallons	/1000 GALS.	\$1.20	\$1.20	\$1.20	\$1.20	--
Next	50,000 Gallons	/1000 GALS.	\$0.85	\$0.85	\$0.85	\$0.85	--
Over	100,000 Gallons	/1000 GALS.	\$0.70	\$0.70	\$0.70	\$0.70	\$0.70

Table 6 is an Analysis of Revenue Requirements showing that an increase in rates is necessary to meet the current requirements .

**Table 6
HICKORY WATER DISTRICT
ANALYSIS OF REVENUE REQUIREMENTS**

	1991	1992	1993	1994	1995
Operating Expenses	\$164,466.00	\$152,853.00	\$158,441.00	\$176,406.00	\$189,134.00
Average Annual Debt Service	\$61,000.00	\$62,306.00	\$62,095.00	\$60,838.00	\$61,500.00
20% Debt Service Coverage	\$12,200.00	\$12,461.20	\$12,419.00	\$12,167.60	\$12,300.00
TOTAL REVENUE REQUIREMENTS	\$237,666.00	\$227,620.20	\$232,955.00	\$249,411.60	\$262,934.00
Operating Revenue From Audit	\$211,545.00	\$224,164.00	\$224,081.00	\$228,707.00	\$232,044.00
REQUIRED INCREASE IN REVENUE	\$26,121.00	\$3,456.20	\$8,874.00	\$20,704.60	\$30,890.00
WATER SALES:					
Water Sales From Audit	\$207,304.00	\$219,625.00	\$219,226.00	\$223,926.00	\$226,553.00
Required Increase In Revenue	\$26,121.00	\$3,456.20	\$8,874.00	\$20,704.60	\$30,890.00
AMOUNT REQ'D FROM SALES	\$233,425.00	\$223,081.20	\$228,100.00	\$244,630.60	\$257,443.00

4. SYSTEM INVENTORY:

4.1. Supply.

Hickory Water District operates a 0.936 MGD (650 GPM) ground water treatment plant located in the community of Hickory, Kentucky. The plant was constructed around 1966 and currently consists of a treatment plant building for housing the chemical feed equipment used for pH adjustment and the disinfection equipment. The system is supplied with 3 wells located on site and these pump raw water through the plant for treatment and directly into a 125,000 gallon elevated tank (pedosphere). The source of supply is considered very good and water shortage is not a concern.

Plant structures are in relatively good condition. The District continues to work closely with Kentucky Division Of Water to comply with all State and Federal regulations and operate the plant as efficiently as possible.

The District's office is also located at this site and is used for administration duties such as collection, record keeping, etc.

4.2. Distribution System.

Approximately 85% of the distribution system is made up of 8 inch and 6 inch mains. These mains are predominately asbestos cement but all recently installed lines are PVC. Approximately 10% of the system is serviced by 4 inch mains while the remaining system consists of 2 inch and smaller lines. Although fire hydrants are located throughout the system, it is not capable of providing fire flows in accordance with PSC's requirements.

Pressure throughout the system is maintained by the 125,000 gallon elevated tank (pedosphere) located at the water treatment plant.

The overall system map on Page 11 shows the piping configuration for the District.

4.3. Pumping Facilities.

Other than the well pumps at the treatment plant there is only one booster station in the District. This station is located at Pottsville, Ky. On Ky. Hwy. 408. This station was originally designed to help fill the Ky. Hwy. 121 tank but has to be operated manually. It is used only during high demand periods.

4.4. Storage Facilities.

The District has 3 elevated storage facilities. The total storage capacity for the system is 300,000 gallons. Table 7 gives a summary of each tank's capacity.

**Table 7
HICKORY WATER DISTRICT
SUMMARY OF STORAGE FACILITIES**

Tank Name	Type	Capacity, Gallons	Overflow Elevation
WTP	Pedosphere	125,000	600'
Hwy. 121	Pedosphere	100,000	600'
Lowes	Pedosphere	75,000	575'

5. **FLOWS:**

Flows created by existing users were considered in two different ways. The first was to consider the theoretical demand based on design criteria of 300 GPD per customer for residential users. The second was to analyze the system, based on actual water sold and the water loss as compared to the master meter readings.

Flows for existing users are summarized in Table 8.

**Table 8
HICKORY WATER DISTRICT
FLOWS FOR EXISTING USERS**

	DAILY AVERAGES (Average Use Day)					MAXIMUM DAY (150%)			THEORETICAL PER CUST.			
	Avg. Water Sold GPD	20% Estimated Loss Of Water	Avg. Water Produced GPD	Rate In 24 Hr. Period GPM	Rate In 18 Hr. Period GPM	Daily Water Produced	Rate In 24 Hr. Period GPM	Rate In 18 Hr. Period GPM	Customers	Avg. Daily Demand GPD	Avg. Daily Rate GPM	Max. Daily Rate GPM
South System	96,426	19,335	115,761	80	121	173,641	121	181	266	79,800	55	83
North System	214,038	42,918	256,956	178	268	385,434	268	401	883	264,900	184	276
Total System	310,464	62,253	372,717	259	388	559,075	388	582	1,149	344,700	239	359

Actual records of water produced during 1995 are shown in Table 9.

**Table 9
HICKORY WATER DISTRICT
RECORD OF WATER PRODUCED - 1995**

	Gal. Pumped	ADF	Rate
January	10,007,000	322,806	224.2
February	9,488,000	338,857	235.3
March	11,217,000	361,839	251.3
April	10,279,000	342,633	237.9
May	9,925,000	320,161	222.3
June	13,891,000	463,033	321.6
July	15,616,000	503,742	349.8
August	11,423,000	368,484	255.9
September	15,627,000	520,900	361.7
October	13,090,000	422,258	293.2
November	11,009,000	366,967	254.8
December	10,162,000	327,806	227.6
Total	141,734,000		
Maximum		520,900	361.7
Average		388,312	269.7
Minimum		320,161	222.3

6. SYSTEM DEFICIENCIES:

The system has been analyzed from a hydraulic standpoint and has identified several areas of need as follows:

6.1. Distribution Facilities.

There are several areas of the District that have occurrences of pressures below 30 psi during even moderate flow demands. Probably the biggest concern is the area immediately North of Mayfield along Ky. Hwy. 121. This area has seen fairly rapid growth in recent years and has experienced low pressures during peak demand periods. The Ky. Hwy. 121 tank is at the same elevation as the WTP tank, but due to its distance from the tank in conjunction with the smaller mains, it does not remain full. The water level in this tank stays approximately 10 below the overflow elevation. Fire protection is also a major concern in this area because of the schools but cannot be provided on a consistent basis without adversely affecting the pressures elsewhere.

There are other areas within the District that have intermittent low pressure problems. These basically stem from the higher ground elevations and not small mains feeding the areas.

6.2. Pumping Facilities.

The only booster pumping station in the District is located at Pottsville and it has adequate capacity to fill the Hwy. 121 tank. If this station were to be used in the future, radio telemetry equipment would be needed to provide automatic operation.

6.3. Storage Facilities.

PSC requires that all Districts provide enough storage of treated water to satisfy the average daily demand. The District is currently producing an average daily flow of approximately 390,000 GPD but only has 300,000 gallons of available storage. The construction of additional storage facilities has been mandated by PSC and the District is to comply with this mandate no later than December 31, 2000.

The WTP Tank is in a good state of repair, as it was repainted only a few years ago. The remaining tanks however need to be repaired and painted immediately. The Lowes tank is probably in the worst condition.

7. LONG RANGE PLAN:

Several alternatives have been studied to meet the District's long term objectives. A brief discussion follows:

Alternative A: This alternative calls for abandonment of the existing treatment facility and purchasing all water from the City Of Mayfield. The WTP Tank and the Ky. Hwy. 121 Tank would be abandoned and a new 500,000 gallon elevated tank would be constructed at Industrial Park No. 3. The overflow elevation of the new tank would be the same as that of the Mayfield Tank.

New lines would be required from Industrial Park No. 3 to Mayfield and a radio controlled valve installed in line that feeds the community of Lowes. The Pottsville booster station would be abandoned and the Lowes tank repaired and painted as required. The community of Lowes would operate at a different pressure than the remaining system.

This alternative would provide fire flows of 500 GPM to the District at a minimum pressure of 30 psi and even greater fire flows at Industrial Park No. 3.

Alternative B: This alternative calls for construction of a new 500,000 gallon elevated tank at Industrial Park No. 3 and installation of new high service pumps at the plant site to fill the new tank. The overflow elevation of the new tank would be the same as that of the Mayfield Tank and a connection would be made to the City's system to serve as an alternative supply. The existing WTP tank would remain in service as a clearwell and the Ky. Hwy. 121 tank would be abandoned.

New lines would be required from Industrial Park No. 3 to the water treatment plant and a radio controlled valve installed in line that feeds the community of Lowes. The Pottsville booster station would be abandoned and the Lowes tank repaired and painted as required. The community of Lowes would operate at a different pressure than the remaining system.

This alternative would provide fire flows of 500 GPM to the District at a minimum pressure of 30 psi and even greater fire flows at Industrial Park No. 3.

Alternative C: This alternative calls for splitting the District into a third pressure zone to be served by the City Of Mayfield. This South Zone would operate at the same pressure as the City and a new 200,000 gallon tank would be required to meet PSC's storage requirements.

The Northern zone would continue to operate at the same pressure it operates at today. The existing WTP Tank and Ky. Hwy. 121 Tank would not be abolished but repaired and painted as required.

New lines would be required from Industrial Park No. 3 to the water treatment plant and a radio controlled valve installed in line that feeds the community of Lowes. The Pottsville booster station would be abandoned and the Lowes tank repaired and painted as required.

This alternative would not provide fire flows of 500 GPM to all parts of the District. Storage requirements within the Northern zone would be met but growth would be limited. High fire flows at Industrial Park No. 3 would be difficult to obtain.

From an economic standpoint each of the above alternatives are about the same. After careful consideration of the advantages of each, Alternative B was selected as the best for the District. This alternative provides additional storage for growth throughout the District; sufficient pressures to support fire flows; and, an emergency source of supply with the connection to Mayfield.

8. PROPOSED IMPROVEMENTS:

Remington Arms, Inc. is building an 80,000 square foot facility in Industrial Park No. 3. Plant officials have indicated that initially Remington will require about 15,000 GPD and that they hope to double that demand in the near future. The District has adequate capacity to serve the facility and a daily basis. However, Remington has also indicated a fire flow requirement of 1250 GPM and the District is not capable of delivering this on a consistent basis without adversely affecting the pressures of existing customers.

For the immediate future the District proposes to install a new 500,000 gallon elevated tank at Industrial Park No. 3. The location and size of the tank not only satisfies the needs of the entire District, but also opens up the Industrial Park for future development. Abandonment of the Ky. Hwy. 121 Tank will be required along with installation of a new 12" main to the water treatment plant. Figure 3 on Page 22 shows the proposed improvements.

The typical life for mains is 50 years while that of structures is 40 years. The design of the proposed facilities will be based on a 20 year growth projection.

9. PROJECT IMPLEMENTATION:

It is estimated that design of the project will take approximately 6 months and final approval from all agencies will take an additional 3 months. Construction will last approximately 12 months although work will not be continuous through this time period.

Upon final design, Plans and Specifications will be submitted to the Kentucky Division Of Water for review and issuance of a construction permit. Subsequently, an application will be submitted to the Public Service Commission for issuance of a Certificate Of Public Convenience And Necessity. After receipt of all permits and approvals the proposed Work will be advertised for bids and the project will be awarded to the lowest responsible, responsive bidder.

The Project will be set out in two Contracts. One will be responsible for installation of the water mains and appurtenances, including pumps, valves, electrical equipment etc. The second Contract will be responsible for erection of the new tank and related appurtenances as well as demolition of the existing Ky. Hwy. 121 tank.

10. PROJECT COSTS:

A breakdown of Project Costs for the proposed improvements is shown in Table 10 on Page 23. This information shows an estimate of construction, technical, financing, and administrative costs associated with the proposed improvements.

11. SOURCE OF FUNDING:

As shown in Table 10 on Page 23 the project will be funded by a \$500,000 grant from the Kentucky Department Of Commerce and with a loan administered through the Kentucky Infrastructure Authority. The user charges will be increased as required to generate enough revenue to pay the annual debt service. All increases will require PSC approval.

12. CONSTRUCTION PROBLEMS:

No major construction problems are anticipated. The project will not be affected by a high water table and there are no known extensive rock formations in the area. The only difficulties which will be encountered are those associated with existing underground utilities.

13. ENVIRONMENTAL EFFECTS:

Land for the proposed facilities does not have a higher priority use and there will be no displacement of households, businesses or any buildings. The quality of both groundwater and surface water will not be diminished in any way by the proposed facilities and there will be no adverse effects on the topography, climate or soil.

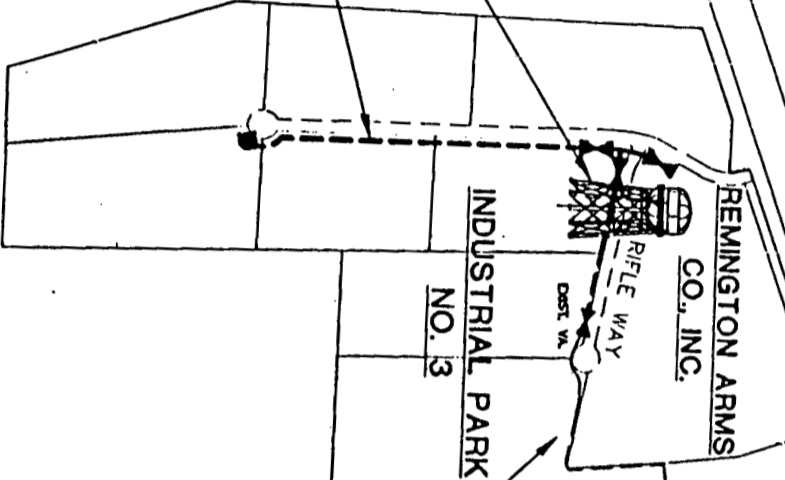
No marketable timber will be affected by the project and there are no known unique or endangered plant or animal species in the area. Minor local noises and air pollution will result from construction but shall be minimized by construction methods and will not be objectionable. There will be no reduction in the value of adjacent property and no adverse effects on the recreational potential of the area.

ILLINOIS CENTRAL GULF RAILROAD



1,026 L.F. OF EXISTING 12" ALONG POULTRY ROAD BY INDUSTRIAL BOARD AND LOCAL DEVELOPMENT CORPORATION

PROPOSED 500,000 GAL. ELEVATED TANK OVERFLOW ELEV. = 655
3,200 L.F. OF PROPOSED 12" SDR 21 PVC WATER MAIN



1,600 L.F. OF EXISTING 12" ALONG HICKORY ROAD (INCLUDING X-ING) BY INDUSTRIAL BOARD AND LOCAL DEVELOPMENT CORPORATION

1,974 L.F. OF EXISTING 12" W/IN INDUSTRIAL PARK BY INDUSTRIAL BOARD AND LOCAL DEVELOPMENT CORPORATION

5,000 L.F. OF PROPOSED 12" SDR 21 PVC WATER MAIN

HICKORY WATER DISTRICT EXISTING TREATMENT PLANT INCLUDING:
OFFICE BUILDING
TREATMENT PLANT BUILDING
3 - WELLS
125,000 GAL. PEDISPHERE

PROPOSED IMPROVEMENTS AT WTP INCLUDING HIGH SERVICE PUMPS AND RADIO TELEMETRY

FIGURE 3
PROPOSED IMPROVEMENTS
HICKORY WATER DISTRICT

HUNTER MARTIN & ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PADUCAH, KENTUCKY

**Table 10
HICKORY WATER DISTRICT
PRELIMINARY PROJECT COSTS**

	Quantity	Units	Unit Cost	Subtotal	TOTAL	EDA SHARE 53.94%	KIA SHARE 46.06%
CONSTRUCTION COSTS:							
Inside Industrial Park:							
12 Inch PVC, Class 200	3,200	LF	\$16.00	\$51,200.00			
Ductile Iron	1,000	Lbs.	\$2.75	\$2,750.00			
12 Inch Valves	4	Ea.	\$1,100.00	\$4,400.00			
Tie - Ins	1	Ea.	\$400.00	\$400.00			
Crushed Stone	25	CY	\$25.00	\$625.00			
500,000 Gal. Elevated Tank	1	LS	\$535,000.00	\$535,000.00			
Miscellaneous	1	LS	\$13,150.00	\$16,000.00			
Outside Industrial Park:							
12 Inch PVC, Class 200	5,000	LF	\$16.00	\$80,000.00			
Ductile Iron	1,000	Lbs.	\$2.75	\$2,750.00			
12 Inch Valves	2	Ea.	\$1,100.00	\$2,200.00			
Tie - Ins	1	Ea.	\$400.00	\$400.00			
Crushed Stone	25	CY	\$25.00	\$625.00			
Pressure Reducing Valve	3	Ea.	\$3,500.00	\$10,500.00			
High Service Pumps w/ Radio Telemetry	1	LS	\$35,000.00	\$35,000.00			
Abandon Existing Hwy. 121 Tank	1	LS	\$10,000.00	\$10,000.00			
Miscellaneous	1	LS	\$14,000.00	\$15,500.00			
SUBTOTAL - CONSTRUCTION				\$767,350.00	\$767,400.00	\$413,915.86	\$353,484.14
TECHNICAL							
Basic	7.8838%	Construction	\$60,500.00				
Through Contract Award			80.00%	\$48,400.00			
During Construction			20.00%	\$12,100.00			
Inspection (Part - Time As Needed)				\$19,000.00			
Extra (Soil Testing, Critical Phase Insp.)				\$19,000.00			
Surveys				\$500.00			
Easements/Permits/Right-Of-Way				\$500.00			
Soil Investigation				\$2,500.00			
Critical Phase Inspection				\$4,500.00			
Financing Assistance				\$2,500.00			
PSC Rate & Construction Case				\$5,000.00			
Hydraulic Analysis				\$5,000.00			
Subtotal - Extra				\$20,500.00			
SUBTOTAL - TECHNICAL				\$100,000.00	\$100,000.00	\$53,937.43	\$46,062.57
INTEREST DURING CONSTRUCTION	1	LS		\$5,681.76	\$5,682.00	\$3,064.72	\$2,617.28
ADMINISTRATIVE	1	LS		\$7,500.00	\$7,500.00	\$4,045.31	\$3,454.69
LAND, STRUCTURES, R.O.W., APPRAISALS	1	LS		\$500.00	\$500.00	\$269.69	\$230.31
RELOCATION EXPENSES & PAYMENTS	1	LS		\$500.00	\$500.00	\$269.69	\$230.31
CONTINGENCIES	4.8995%	Of Project Costs	--	\$45,418.00	\$45,418.00	\$24,497.30	\$20,920.70
TOTAL PROJECT COSTS					\$927,000.00	\$500,000.00	\$427,000.00
Per Cent Of Project						53.94%	46.06%

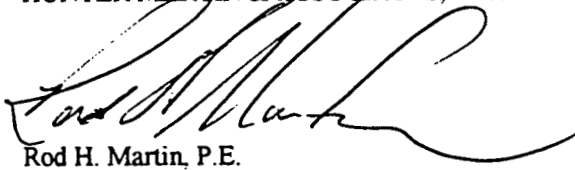
14. **CONCLUSIONS AND RECOMMENDATIONS:**

The foregoing report has been prepared for use by the Hickory Water District Board Of Commissioners, the Economic Development Administration, the Public Service Commission, the Kentucky Infrastructure Authority and the Kentucky Division Of Water for review, comments and approval of the proposed improvements. This report is intended to provide a comprehensive analysis of the proposed improvements and provide cost estimates that are realistic.

We trust that you will find this report complete in every respect and that it meets the planning and financial needs of the District.

Respectfully Submitted,

HUNTER MARTIN & ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Rod H. Martin", is written over the typed name. The signature is fluid and cursive.

Rod H. Martin, P.E.



HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

EXHIBIT J

- EXHIBIT J1 - 3 sets Of Plans and Specifications for "1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (BOOSTER PUMP STATION AND MAINS), CONTRACT A", dated April, 1998 (Bid October, 1998) are bound separately and filed with the Application.
- EXHIBIT J2 - 3 sets Of Plans and Specifications for "1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (500,000 GALLON ELEVATED TANK), CONTRACT B", dated, April, 1998 (Bid October, 1998) are bound separately and filed with the Application.

JAMES E. BICKFORD
SECRETARY



EDR/KIA
9/6/99

Contract B
(P/S Record)

PAUL E. PATTON
GOVERNOR

RECEIVED JUL 20 1998

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

July 14, 1998

*Orig + Copy of letter
cont A
cont B
copy of letter + orig
attached in file room*

Hickory Water District
Highway 849, Box 23
Hickory, Kentucky 42051

RE: DW #0420194-98-002
Water System Improvements
Contract A-Pump Station
Contract B-Elev. Tank
Graves County, Kentucky

Dear Sirs:

This is to advise that plans and specifications covering the above referenced subject are APPROVED with respect to sanitary features of design as of this date with the following stipulations:

1. If PVC piping is used, it must be NSF approved and manufactured in accordance with ASTM standards.
2. All dead end lines must be provided with a properly sized blow-off assembly, flush hydrant or fire hydrant (minimum 2 1/2 inch diameter outlet) for flushing purposes.
3. Upon completion of construction, disinfection shall be strictly in accordance with the procedure designated in the State Regulations, which reads as follows:

"All new water distribution systems including storage distribution tanks and repaired portions of, or all extensions to existing systems shall be thoroughly disinfected before being placed in service, by the use of chlorine or chlorine compounds in such amounts as to produce a concentration of at least fifty (50) ppm and a residual of at least twenty five (25) ppm at the end of 24 hours and followed by thorough flushing."



Printed on Recycled Paper
An Equal Opportunity Employer M/F/D

New or repaired water distribution lines shall not be placed into service until bacteriological samples taken at the points specified in 401 KAR 8:150 Section 4 (2) are examined and are shown to be negative following disinfection.

4. An alternate acceptable method for storage tank disinfection is as follows:

Fill tank with enough water (containing a free chlorine concentration of at least 250 mg/l) to spray all inside tank surfaces with the chlorinated water. Repeat the spraying again at no less than 1.0 hour from the end of the first spraying. Drain the tank at no less than 30 minutes from end of second spraying before filling for use.

5. Chlorinated water resulting from disinfection of treatment facilities and new, repaired, or extended distribution systems shall be disposed in a manner which will not violate 401 KAR 5:031.
6. A minimum pressure of 30 psi must be available on the discharge side of all meters.
7. Water mains shall be laid at least 10 feet horizontally from any existing or proposed sewer. A sewer is defined as any conduit conveying fluids other than potable water. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, this office may allow deviation on a case-by-case basis, if supported by data from the design engineer. Such deviation may allow installation of the water main closer to a sewer, provided that the water main is laid in a separate trench or on an undisturbed shelf located on one side of the sewer at such an elevation that the bottom of the water main is at least 18 inches above the top of the sewer. This deviation will not be allowed for force mains.

Water mains crossing sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. At crossings, one full length of the water pipe shall be located so both joints will be as far from the sewer as possible. Special structural support for the water and sewer pipes may be required.

8. Water mains shall be laid at least 10 feet horizontally from any existing or proposed sewer. A sewer is defined as any conduit conveying fluids other than potable water. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, this office may allow deviation on a case-by-case basis, if supported by data from the design engineer. Such deviation may allow installation of the water main closer to a sewer, provided that the water main is laid in a separate trench or on an undisturbed shelf located on one side of the sewer at such an elevation that the bottom of the water main is at least 18 inches above the top of the sewer. This deviation will not be allowed for force mains.

Water mains crossing sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. At crossings, one full length of the water pipe shall be located so both joints will be as far from the sewer as possible. Special structural support for the water and sewer pipes may be required.

9. For underwater crossing greater than 15 feet in width the following shall be provided:
 - a. The pipe shall be of special construction, having flexible water tight joints, except if concrete encased;

- b. valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible, and not subject to flooding; and the valve closest to the supply source shall be in a manhole; and,
 - c. permanent taps shall be made on each side of the valve within the manhole to allow insertion of a small meter to determine leakage and for sampling purposes.
- 10. Isolation valves shall be provided close to the tank site in order to drain the tank.
 - 11. Pieces of asbestos concrete resulting from the tap shall be double bagged, placed in a rigid container and disposed of in an approved landfill.

During the process of tapping the asbestos concrete main, the contractor shall conform to OSHA regulations governing the handling of hazardous waste.

- 12. When this project is completed, the owner shall submit a written certification to the Division of Water that the above referenced water supply facilities have been constructed and tested in accordance with the approved plans and specifications and the above stipulations. Such certification shall be signed by a registered professional engineer.

If this water line project will cross a stream or wetland, the attached Water Quality Certification will apply. Please read this certification and make this a part of any contract to install the water lines. If you have any questions please contact John Dovak of the Water Quality Branch at 502/564-2225, extension 485.

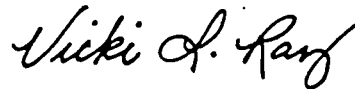
Since the requirements of Administrative Regulations 401 KAR 4:050, Section 2 are met with regard to subfluvial pipe crossings, a floodplain construction permit will not be required pursuant to KRS 151.250 for this aspect of the project. Please note the reference to subfluvial pipe line crossings in the enclosed copy of the regulations.

Contracts A & B
July 14, 1998
Page five

This approval has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this approval does not relieve the applicant from the responsibility of obtaining any other approvals, permits or licenses required by this Cabinet and other state, federal and local agencies.

Unless construction of this project is begun within one year from the date of approval, the approval shall expire. If you have any questions concerning this project, please contact Solitha Dharman at 502/564-2225, extension 572.

Sincerely,



Vicki L. Ray, Branch Manager
Drinking Water Branch
Division of Water

VLR:SWD:lm

Enclosures

C: Hunter Martin and Associates
Graves County Health Department
Public Service Commission
Division of Plumbing
Paducah Regional Office
Water Quality Branch
Water Resources Branch
Drinking Water Files



COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

General Certification--Nationwide Permit #12--Utility Line Backfill and Bedding

This General Certification is issued in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33USC 1314), as well as Kentucky Statute KRS 224.16-070.

The Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 5, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under 33 CFR Part 330 Appendix A(B) (12), namely utility line backfill and bedding provided that the following conditions are met:

- 1) Utility line construction projects through jurisdictional wetlands shall not result in conversion of the area to non-wetland status.
- 2) For the purpose of this General Certification, streams are defined as a solid or dashed blue line on the most recent version of USGS 1:24,000 topographic map. For impacts to streams from utility line construction the following conditions must be met:
 - A) Utility line installation in waters of the Commonwealth shall be minimized to the greatest possible extent.
 - B) All excavations within a stream, necessary to complete a utility line construction project, shall be done in such a manner as to prevent degradation of Waters of the Commonwealth. Spoil material from utility line excavations shall not be allowed to enter the flowing portion of the stream.
 - C) Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
 - D) Effective erosion and sedimentation control measures must be employed at all times during the project to prevent degradation of waters of the Commonwealth.
 - E) Site regrading and reseeded will be accomplished within 14 days after disturbance.



NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water

401 KAR 4:050. Construction exemptions.

RELATES TO: KRS 151.110, 151.250, 151.310

STATUTORY AUTHORITY: KRS 151.230, 151.250

NECESSITY AND FUNCTION: In the course of regulating construction in or along streams pursuant to KRS 151.250, the Natural Resources and Environmental Protection Cabinet frequently encounters actions or proposed actions which are of such nature or location as to have little potential for damage or such that any damage which would occur is limited in extent to the immediate vicinity of the action. This regulation exempts construction of this type from the provisions of KRS 151.250.

Section 1. A construction permit pursuant to KRS 151.250 shall not be required for construction in or along a stream whose watershed is less than one (1) square mile, except for the construction of dams as defined by KRS 151.100 or other water impounding structures or for any construction that does or may endanger life or cause severe damage to residential or commercial property.

Section 2. A construction permit pursuant to KRS 151.250 shall not be required for a subfluvial utility or pipeline crossing provided that the construction of the crossing meets the following criteria:

(1) During the construction of the crossing, no material may be placed in the stream or in the flood plain of the stream to form construction pads, coffer dams, access roads, etc., unless prior approval has been obtained from the cabinet.

(2) The trench shall be backfilled as closely as possible to the original contour. All excess material from construction of the trench shall be disposed of outside of the flood plain unless the applicant has received prior approval from the cabinet to fill within the flood plain.

(3) For subfluvial crossings of erodible channels, there shall be at least thirty (30) inches clear to the top of the pipe or conduit at all points.

(4) For subfluvial crossings of nonerodible channels, there shall be at least six (6) inches of clear cover above the top of the pipe or conduit at all points, and the pipe or conduit shall be encased on all sides by at least six (6) inches of concrete.

(5) The weight of a pipe and its contents during normal operating conditions at all points must exceed that of an equal volume of water, or the applicant must provide the division with sufficient information to show that the pipe and joints have sufficient strength. (7 Ky.R. 365; eff. 11-6-80.)

3) This General Certification shall not apply to those waters of the Commonwealth identified as national or state outstanding resource waters or those waterbodies whose quality exceeds that necessary to support propagation of fish, shellfish, wildlife and recreation in and on the water. An individual Water Quality Certification will be required for projects in these waters.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

This general certification will expire on February 10, 2002, or sooner if the COE makes significant changes to this nationwide permit.

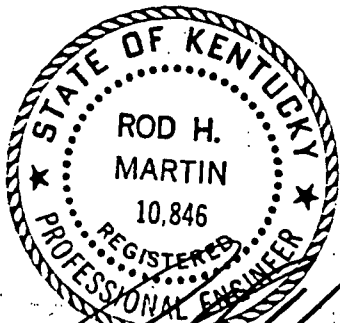
HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

1998 INDUSTRIAL PARK
WATER SYSTEM IMPROVEMENTS
(BOOSTER PUMP STATION AND MAINS)

CONTRACT "A"

GENERAL CONTRACT DOCUMENTS
AND SPECIFICATIONS

APRIL, 1998



HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PADUCAH, KY. 42003 • (502) 554-2737

EDA PROJECT NO. AKY 0382

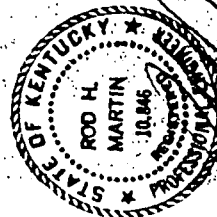
SET NO.  EXHIBIT K1
Page 9 Of 12

ERS
HAIRMAN
RETARY
URER

APPROVED
IN ACCORDANCE WITH LETTER OF APPROVAL
Sidie Ray
DIVISION OF WATER
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
50
REVIEWED
CHECKED
APPROVAL DATE 7/11/93
EXPIRATION DATE 7/11/99
SANITARY FEATURES OF DESIGN - WATER SUPPLY FACILITIES ONLY

INDEX	
SHEET	TITLE
1	COVER
2	OVERALL DISTRIBUTION SYSTEM
3	U.S. HWY 45 SUPPLY MAIN AND INDUSTRIAL PARK IMPROVEMENTS
4	ELEVATED TANK SITE PLAN AND MISCELLANEOUS DETAILS
5	TREATMENT BUILDING ADDITION AND SITE PLAN IMPROVEMENTS
6	TREATMENT BUILDING ADDITION, PUMPS AND PLUMBING DETAILS
7	TREATMENT BUILDING ADDITION AND ELECTRICAL DETAILS
8	WATER SYSTEM STANDARDS

ASSOCIATES, INC.
SURVEYORS
AL KENTUCKY 42003
AL) 554-2738



SET NO. 4

HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

1998 INDUSTRIAL PARK
WATER SYSTEM IMPROVEMENTS
(500,000 GALLON ELEVATED TANK)

CONTRACT "B"

GENERAL CONTRACT DOCUMENTS
AND SPECIFICATIONS

APRIL, 1998



HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PADUCAH, KY. 42003 • (502) 554-2737


EDA PROJECT NO. AKY 0382

SE'

EXHIBIT K1
Page 11 Of 12

INDEX

TITLE

COVER

OVERALL DISTRIBUTION SYSTEM

INDUSTRIAL PARK NO. 3
ELEVATED TANK

APPROVED

IN ACCORDANCE WITH LETTER OF APPROVAL

Viki Ray

DIVISION OF WATER
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

SD
REVIEWED

CHECKED

7-14-93
APPROVAL DATE
7-14-97
EXPIRATION DATE

ESSENTIAL FEATURES OF DESIGN - WATER SUPPLY FACILITIES ONLY



6/27/93

SET NO.

4

Paste copy of advertisement on this margin.

PROOF OF PUBLICATION

Mayfield, KY

In Account With

The Mayfield Messenger

Mayfield, KY

Title of Advertising: Legal

3x6" @ \$5.08	18"	91.44
3x5 1/2" @ \$5.08	16 1/2"	83.82
3x6" @ \$1.82	18"	32.76
3x5 1/2" @ \$1.82	16 1/2"	30.03

Personally appeared before me, Eric Hoffman, Publisher of The Mayfield Messenger, a daily newspaper published in Mayfield, Graves County, Kentucky, and on his oath says that the above are the true charges for advertising, which appeared in The Mayfield Messenger on the following dates:

all appeared on 9-29 daily
+ on 9-30 weekly

Signed Eric Hoffman
Publisher of The Mayfield Messenger

Subscribed and sworn to before me, Carolyn Williams, a Notary Public in Mayfield, Graves County, Kentucky, by Eric Hoffman this

Signed Carolyn Williams

My Commission Expires MY COMMISSION EXPIRES
AUGUST 12, 2001

The Mayfield Messenger
P.O. Box 709, 201 North 8th Street
Mayfield, KY 42066
(502) 247-5223
ADVERTISING STATEMENT

(502) 554-2737

Hickory Water District
PO Box 128
Hickory KY

42051

Inv #	Date	Due	Type	Amount	Discount	Balance	Memo
d1090559	09/29/98	10/31/98	INV	91.44	.00		3x6 inch ad
d1090559	10/09/98		PAY	-91.44	.00	.00	ch#7617
d1090560	09/29/98	10/31/98	INV	83.82	.00		3x5.5 inch ad
d1090560	10/09/98		PAY	-83.82	.00	.00	ch#7617
wk090559	09/29/98	10/31/98	INV	32.76	.00		3x6 inch ad
wk090559	10/09/98		PAY	-32.76	.00	.00	ch#7617
wk090560	09/29/98	10/31/98	INV	30.03	.00		3x5.5 inch ad
wk090560	10/09/98		PAY	-30.03	.00	.00	ch#7617
				Total		.00	

Jacqueline Bigar's stars

HAPPY BIRTHDAY for Wednesday, Oct. 7, 1998:
 Feelings emerge with sadness. Often, you are irritated, but you are unsure why. You have a tendency to internalize anger. Express your feelings before they take hold on you and others. You can earn more money through associations. Loved ones, children and flirtations take many unexpected turns. Being open will bring success. Your imagination comes through for you, with great ideas. If you are single, romance will thrive. Your love life will be unstable yet exciting. Don't count on anything being long-term just yet. If attached, feelings deepen. You reevaluate the old sparks that initially marked your relationship. TAURUS helps you budget.

The Stars Show the Kind of Day You'll Have: 5-Tuesday, 4-Wednesday, 3-Average, 2-Good, 1-Difficult.

ARIES (March 21-April 19)
 You are enthusiastic, energetic and work. Tighten your belt, and make sure your procedures work. Be realistic about a friend's assistance. Unsettled, positive news allows you more freedom to pursue your goals. Excitement about a new or long-term desire. Tonight: Go shopping.

TAURUS (April 20-May 20)
 You smile quite a long way in putting others at ease. Be more forthcoming in your dealings. Boomer give you more space than you need at work. Remain energetic. Recognize your limitations in romance. Your steady work style wins friends. Tonight: What makes you happy?
GEMINI (May 21-June 20)
 Take a back seat, and stay mobile. Listen to someone's advice; the feedback enlightens you. Consider making a change in your personal life or style. Go within to make a decision. A new friendship could develop into a lot more, if you desire. Tonight: Curl up with a good book.
CANCER (June 21-July 23)
 Aim for what you want; don't sell out. Remain positive, and be direct. Make calls, and reach out for others. A partner proves unpredictable, especially when the problem is a financial one. Question recent choices. Come from a secure, loving stand. Tonight: With your friends.
LEO (July 23-Aug. 22)
 Respond to the moment. You want to make a major expenditure. But consider how many hours it takes to make this amount of money. Assume a leadership role. A partner holds both restraints and a key to your way of thinking. Tonight: Com-

pliment someone you love.
VIRGO (Aug. 23-Sept. 23)
 Reach out for others, and be willing to take a risk. Your high energy makes a big difference. A coworker first reveals respect to you. The unexpected occurs. Your willingness to spend money on a project (there's no people-pleasing with you). Tonight: On the computer.
LIBRA (Sept. 23-Oct. 23)
 One-to-one relating works. You love one who expresses feelings outrageously. You might not like what you hear, but you know how to talk to the person. Your attitude sparks with someone. Inject more romance into your relationship. Tonight: Spice up your life.
SCORPIO (Oct. 23-Nov. 21)
 Others present another point of view. Expect teamwork to bring you the results you want. A family member creates an upsurge. Listen carefully to your intuition regarding this person. Be understanding, and follow through with a caring posture. Tonight: Do what you want.
SAGITTARIUS (Nov. 22-Dec. 21)
 Dig into your own ability to realize through projects someone who has a harder time accomplishing things. The other, to get the job done. A friend comes through for you. Make

time for an important meeting. Tonight: Work late, if needed.
CAPRICORN (Dec. 22-Jan. 19)
 Let your creativity come out. Reach out for someone, and take wild swings. Be a careful investor. A boss or someone who respects you appreciates you. Accept the compliments and acknowledgment. Tonight: Go with excitement.
AQUARIUS (Jan. 20-Feb. 18)
 You unpredictable shakes people up, whether you intend to or not. A partner comes to the rescue and is more than willing to step in. Be sure to touch with your feelings. Explore a new idea. Join in, and take off. Adventure suits you fine. Tonight: Happy at home.
PISCES (Feb. 19-March 20)
 Unusual insights here you are getting strongly. Calm down, and have a long-overdue discussion with a dear friend. Listen carefully to the feedback, and say-communications to be more assertive. Tonight: Chat up a storm.

BORN TODAY
 Musician Yo-Yo Ma (1955), singer and actor Gene Hackman (1931), actor and director Mel Brooks (1924), actor and director Oliver North (1943).

Business

From page 4

ment, and successfully blamed the Republicans, saying they forced him to it by rejecting vital spending on programs including education, health and Medicare.
 In the end, they had to compromise. He later revealed that began Clinton's comeback from the Democratic loss of Congress in 1994 to his re-election in 1996.
 Early this year, after the disclosure that independent Council member Steve Largent was investigating the Lewinsky affair, Clinton, who then was denying it, rebounded with the aid of the Clinton advisers. He put Republicans on the defensive by demanding that the budget surplus be off limits to tax cuts until the 21st century financing of Social Security had been fixed.
 Clinton used his political popularity, of course, and Social Security is politically sacred to him, and Clinton is still at it.

"I will insist that we reserve the entire surplus until we have set aside this historic opportunity to save Social Security and will veto any bill that doesn't do that," he said. Clinton said after the House last week passed a tax cut of \$80 billion over the next five years.
 Republicans said 90 percent of the surplus still would be reserved for Social Security, more than enough to guarantee the future of the system.
 Clinton said the tax cut is good politics but the wrong thing to do.

Democrats can stop the tax bill in the Senate, where it would take 60 votes. But it could get more complicated. GOP leaders would like to force Clinton to sign, or make it part of an overall budget settlement.
 Sen. Tom Daschle, the Democratic leader, said that would invite a Clinton veto and government shutdowns like those in 1995 and 1997.
 Twelve of the 13 appropriations bills to finance the government have yet to be enacted.

Democrats can stop the tax bill in the Senate, where it would take 60 votes. But it could get more complicated. GOP leaders would like to force Clinton to sign, or make it part of an overall budget settlement.
 Sen. Tom Daschle, the Democratic leader, said that would invite a Clinton veto and government shutdowns like those in 1995 and 1997.
 Twelve of the 13 appropriations bills to finance the government have yet to be enacted.

Let The Classifieds Work For You! Call 247-5223 To Place Your Ad

THE CLASSIFIEDS

DI-HAAS MEMORIAL NURSING HOME Is Now Accepting Applications

KEY REGISTERED NURSES THE WEEKEND DAY POSITION

SATURDAY AND SUNDAY, 12 HOUR SHIFTS

All applicants must be U.S. Born Nurses with active license. Have Memorized a study book facility, showing excellent bedside, enthusiastic qualities and great opportunities of working with vibrant patients and the ability to apply in person Mon. PM, 9:00-4:00 at:

HAWES MEMORIAL NURSING HOME
 1004 Holiday Lane, Fulton, KY 42041

Mums-Mums Mums

PANSIES - PUMPKINS - GOURDS - MULCH

TIME FOR FALL PLANTING!

20% OFF SHRUBS

Oakdale Nursery & Rex Beckham Greenhouse

Open Mon.-Sat., 9 AM-6 PM • 858-2288 • 1-800-478-1978

1230 S. W. Hwy. East, (Rt. 40) 3/4 Mile East of Old U.S. 42 at Potomac

NURSING ASSISTANTS

FULL TIME POSITIONS ARE OPEN NOW

Paid on the job training
 Paid on the job training is complete
 Annual pay raise
 Uniforms are provided free
 Paid vacation
 Paid holidays
 Sick pay benefits
 Paid life insurance
 Health insurance
 Dental insurance
 Retirement Savings Plan

Interested individuals should apply in person at:

HERITAGE MANOR
 401 Indiana Ave., Mayfield, KY
 A Vencor Facility

Business Notice

Custom Framing
 1215 S. Lebanon, Mayfield's Famous Shop 247-8895

BLUEGRASS RECORD ADVANCE
 518 Park Rd. 251-9535

MINI STORAGE - best prices, lowest rates, best storage. Call 247-8834 nights 247-4888 fax

Seasonal Notice

PERENNIAL PASTIME

Garden Shop

Specializing in Gardening Gifts, Handmade Crafts, Mayfield Country Club Gift Shop, Garden Mums & Azaleas

We're Open From 8:00 AM - 5:00 PM
 Tuesday-Saturday
 Off Hwy 48 N, Behind Bennett Station, Ind.

Closing Out, 50% Off! The Garden Shop is now offering 50% Off on all items. Call 247-5223 To Place Your Ad!

Seasonal Notice

STAN'S NURSERY

"No" WINTER MUMS

All Plants on Sale! 822 W. Tucker Rd. 247-7564

Seasonal Notice

MATHIS' ORCHARD

Apple Orchards

Honey Yellow/Lime Tomatoes - Dried Fruits
 Mon. - Sat. 9:30-3:30
 Spence Chapel Rd. 247-5688

Help Wanted

LOOKING FOR A FEDERAL JOB?

The Career America Connection is the go-to source for federal job openings. For free current information on employment opportunities, call Career Connection 1(877)373-3200

Help Wanted

DRIVERS

Celebrity Freight Systems
 1-800-925-5133

Help Wanted

187 Driving Jobs

GOOD FUTURE WITH JOB SECURITY
 Call 345-2728 after 5 PM

Help Wanted

HELP WANTED: Earn up to \$500 per week assembling products at home. No experience. 1750A/44-1700, KY 204

ADVERTISEMENT FOR BIDS CONTRACT "A"

Hickory Water District
 Kentucky Hwy 1241 North
 P.O. Box 126, Hickory, KY 42051

Separate sealed BIDS for the construction of 1998 Industrial Park Water System Improvements (Booster Pump Station and Main) - Contract "A" (including Two Close Coupled Centrifugal Pumps, Controls, Building Addition, 9,200 LF of 12 inch Main, Etc.) will be received by Hickory Water District at the office of Hunter Martin & Associates, Inc., 3220 Lone Oak Rd., Paducah, KY 42003, until 10:00 A.M. CDT, Friday, October 16, 1998, and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

Hunter Martin & Associates, Inc., Paducah, KY
 Hickory Water District, Hickory, Kentucky
 Associated General Contractors, Paducah, Kentucky
 P.W. Dodge, CIG, Evansville, Indiana
 Tri-State Construction News, Evansville, Indiana.

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$100.00 for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the payments, and any non-bidder or sub-bidder upon returning the CONTRACT DOCUMENTS will be refunded \$50.00.

The OWNER reserves the right to waive any informatics or to reject any or all bids.

Each BIDDER must deposit with his BID, security in the amount, form and subject to the conditions provided in the information for Bidders. No BIDDER may withdraw his BID within 90 days after the actual date of the opening thereof.

September 17, 1998
 Robert H. Sullivan, Chairman

ADVERTISEMENT FOR BIDS CONTRACT "B"

Hickory Water District
 Kentucky Hwy 1241 North
 P.O. Box 126, Hickory, KY 42051

Separate sealed BIDS for the construction of 1998 Industrial Park Water System Improvements (500,000 Gallon Elevated Tank) - Contract "B" will be received by Hickory Water District at the office of Hunter Martin & Associates, Inc., 3220 Lone Oak Rd., Paducah, KY 42003, until 10:00 A.M. CDT, Friday, October 16, 1998, and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

Hunter Martin & Associates, Inc., Paducah, KY
 Hickory Water District, Hickory, Kentucky
 Associated General Contractors, Paducah, Kentucky
 P.W. Dodge, CIG, Evansville, Indiana
 Tri-State Construction News, Evansville, Indiana.

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$100.00 for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the payments, and any non-bidder or sub-bidder upon returning the CONTRACT DOCUMENTS will be refunded \$50.00.

The OWNER reserves the right to waive any informatics or to reject any or all bids.

Each BIDDER must deposit with his BID, security in the amount, form and subject to the conditions provided in the information for Bidders. No BIDDER may withdraw his BID within 90 days after the actual date of the opening thereof.

September 17, 1998
 Robert H. Sullivan, Chairman

CLASSIFIEDS

small ads BIG deals

070 Help Wanted

NOW HIRING
 Day positions Apply in person at Mayfield, 1211 Park Road, Mayfield.

090 Jobs Wanted

WILL CLEAN: hours of office, reasonable rates, dependable & mature. Call 251-0033

090 Business Opportunity

WORK FROM HOME, making & herbal, botanical & Soles sale car, cement & national products. Pam Perry, 502-527-4758

090 Business Opportunity

NEEDED 78 PEOPLE TO LOSE 10-29 POUNDS
 By October 30! +100% return. Order recommended. Call 901-235-4690

090 Business Opportunity

MAINTENANCE ENGINEER
 for Mayfield, Russellville, Bowling Green area, built-in-chiller system. Pay based on experience, not furnished with supplies. Call 606/581-9506 or fax resume to 606/581-1207. Ad for Lease.

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Jobs Wanted

WILL BABYSIT IN MY HOME
 Call 278-2547

090 Jobs Wanted

MOTHER OF TWO WILL BABYSIT
 in my home, 247-5971

090 Business Opportunity

WORK FROM HOME, making & herbal, botanical & Soles sale car, cement & national products. Pam Perry, 502-527-4758

090 Business Opportunity

NEEDED 78 PEOPLE TO LOSE 10-29 POUNDS
 By October 30! +100% return. Order recommended. Call 901-235-4690

090 Business Opportunity

MAINTENANCE ENGINEER
 for Mayfield, Russellville, Bowling Green area, built-in-chiller system. Pay based on experience, not furnished with supplies. Call 606/581-9506 or fax resume to 606/581-1207. Ad for Lease.

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Business Opportunity

STAR WARS LASER TAG
 2 games. Call 373-5784

090 Home Furnishings

RATTAN COUCH & chair, ottoman, glass end table & coffee table. \$150. Call 251-0700 after 6 PM.

090 Home Furnishings

LANE SECTIONAL: 2 inch sleeper sofa, blue, like new. \$1200. Call 251-0700 after 6 PM.

090 Home Furnishings

3 PICE: leather bedroom set, white & red, plus accessories. \$350. Call 345-2312

090 Home Furnishings

2 BEDROOM: suite, red and tan, like new, bed & chest, pacor, large vanity, bed, chest & nightstand. \$275 each. Call 628-3528

090 Home Furnishings

4 PICE TWIN BEDROOM SET: Call 247-5223 To Place Your Ad!

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

090 Home Furnishings

140 Wanted to Buy
 NOW BUYING: junk cars, trucks & tractors. Gary Bell 247-1262 or 638-3120

RECEIVED OCT 28 1998



HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
(502) 554-2737 • FAX (502) 554-2738

"Established 1952"

HUNTER H. MARTIN (1924 - 1997)
Founder
RICH MARTIN, P.E., S.
President
MICHAEL GARMINER
Vice President
BETTY J. GARMINER
Secretary/Treasurer

File

September 21, 1998

Mr. Robert Sullivan, Chairman

Hickory Water District
P. O. Box 128
Hickory, KY. 42051

**RE: HICKORY WATER DISTRICT 1998 INDUSTRIAL PARK WATER SYSTEM
IMPROVEMENTS (BOOSTER PUMP STATION & MAINS) - CONTRACT
"A" ADVERTISEMENT FOR BIDS**

The attached ADVERTISEMENTS FOR BIDS were sent, this date, to the following:

3-D ENTERPRISE, INC.
3257 LOCHNESS DRIVE LEXINGTON, KY 40583

A & S SERVICES, INC
133 U.S. HWY. 41 SOUTH HENDERSON, KY 42420

ASPHALT PAVING
ROUTE 1, BOX 87 CALVERT CITY, KY 42029

B. H. GREEN & SON CONTRACTORS
P. O. BOX 7645 3510 HINKLEVILLE RD. PADUCAH, KY. 42002

BENNY CRAWFORD CONSTRUCTION
ROUTE 2 FANCY FARM, KY 42039

BOBBY LUTRELL & SONS
5276 CEDAR GROVE ROAD OLATON, KY 42361

BRAY & SHELTON CONSTRUCTION
1400 HAPPY VALLEY RD. GLAGSLOW, KY 42141

BROCK EXCAVATING, INC.
407 HWY 2392 CORBIN, KY 40701

BURGESS CONSTRUCTION
P. O. BOX 344 MORGANFIELD, KY 42437

BUTLER CONSTRUCTION
P.O. BOX 146 HOPKINSVILLE, KY 42241-0146

C & B CONTRACTING
2004 BENTLEY HOPKINSVILLE, KY 42240

CADIZ EXCAVATING
P.O. BOX 449 CADIZ, KY 42211

CINCO, INCORPORATED
P.O. BOX 1187 MT. STERLING, KY 40353

CRENSHAW'S BACKHOE
7135 HARMONY GROVE ROAD CROFTON, KY 42217

CYCLONE, INC.
7350 RUSSELLVILLE ROAD BOWLING GREEN, KY 42101

D & N CONSTRUCTION
ROUTE 1, BOX 1691 MELBER, KY 42069

DEIG BROTHERS LUMBER & CONSTRUCTION, INC.
P. O. BOX 6429 EVANSVILLE, IN 47719-0429

DICK WALKER BUILDING CONTRACTOR AND DEVELOPER
P.O. BOX 637 BRIDGETT DRIVE MT. STERLING, KY 40353

DONALD PETERS CONSTRUCTION
4948 HWY. 1078 NORTH HENDERSON, KY 42420

FOUR STAR CONSTRUCTION COMPANY
135 EDWARD MILL ROAD HOPKINSVILLE, KY 42240

G & L PIPE ENGINEERING, INC.
P. O. BOX 157 DUNDEE, KY 42338

GARRISON CONSTRUCTION CO., INC.
ROUTE 5, BOX 175 GREENSBURG, KY 42743

GEARY EXCAVATING
CENTRAL CITY, KY 42330

H & G CONSTRUCTION
P. O. BOX 8409 PADUCAH, KY 42002-8409

J. S. REECE COMPANY
1751 HARDCO DRIVE CLARKSVILLE, TN 37040

JENNINGS & LITTLE
390 HICKORY HILLS DRIVE LIVERMORE, KY 42352

JIM SKAGGS, INC.
2325 AIRWAY COURT BOWLING GREEN, KY 42103-7124

JOHNSON'S FARM & EXCAVATING
R.R. 1 BOX 413 FORT BRANCH, IN 47648

L. R. CHAPMAN CONSTRUCTION
BOX 489 - CAROLYN AVENUE LEWISPORT, KY 42351

L. T. BLACK CONSTRUCTION
RT. 2 BOX 149 BARDWELL, KY 42023

MIKE COLSON
ROUTE 1 BARLOW, KY 42024

MURTCO MECHANICAL CONTRACTORS, INC.
815 ABELL STREET PADUCAH, KY 42003

R. L. PERSONS CONSTRUCTION
P. O. BOX 3938 POPLAR BLUFF, MO 63902-3938

R.B. REED CONSTRUCTION COMPANY
212 N. VALLEY VIEW DR. MT. STERLING, KY 40353-7923

ROSS CONSTRUCTION
3087 HALLS CREEK ROAD OLATON, KY. 42361

ROWLAND CONSTRUCITON
P.O. BOX 5227 MAYFIELD, KY 42066-5227

S & S BACKHOE
17839 ONIONVILLE ROAD HENDERSON, KY 42420

SALMON PLUMBING
149 SOUTH BARDSLOW ROAD MT. WASHINGTON, KY 4047

SCOTT & RITTER
2335 BARREN RIVER ROAD BOWLING GREEN, KY 42701

STOTTS CONSTRUCTION CO., INC.
3615 BURKESVILLE RD. COLUMBIA, KY 42720

TERRY LAND DEVELOPMENT, INC.
P. O. BOX 578 CUNNINGHAM, KY 42035

TILFORD CONTRACTORS
P. O. BOX 1396 PADUCAH, KY 42002

TOP GRADE EXCAVATING
409 W. 12TH ST. HUNTINGBURG, IN 47542

UTICON, INC.
303 BROWNSVILLE RD. MORGANTOWN, KY 42261

W. A. DAVIS CONSTRUCTION
220 CHAPEL LANE BENTON, KY 42025

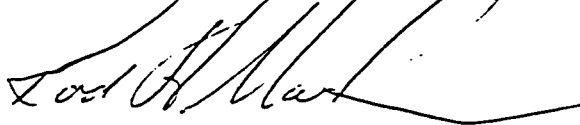
WAHL'S EXCAVATING
P. O. BOX 2425 PADUCAH, KY 42003

WILFORD & SONS, INC.
P. O. BOX 1219 CADIZ, KY 42211

If you have any questions, or need additional information, do not hesitate to contact me.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.



Rod H. Martin, P. E.

RHM:as

cc: Brad Davis, Purchase Area Development District



"Established 1953"

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
(502) 554-2737 • FAX (502) 554-2738

HUNTER H. MARTIN (1926 - 1997)
Founder
ROD H. MARTIN, P.E., S.
President
MICHAEL GARDNER
Vice President
HETTY J. GARDNER
Secretary/Treasurer

File

September 21, 1998

Mr. Robert Sullivan, Chairman

Hickory Water District
P. O. Box 128
Hickory, KY 42051

**RE: HICKORY WATER DISTRICT 1998 INDUSTRIAL PARK WATER SYSTEM
IMPROVEMENTS (500,000 GALLON ELEVATED TANK) CONTRACT "B"
ADVERTISEMENT FOR BIDS**

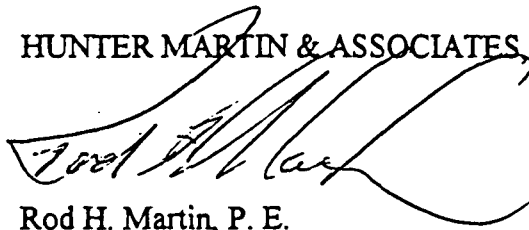
An ADVERTISEMENT FOR BIDS was sent, this date, to the following:

- Advance Tank & Construction, P. O. Box 124 Plainfield, IL 60544
- Brown Steel Contractors, Inc., 57 East Broad Street Newnan, GA 30263
- Caldwell Tanks, Inc., 400 Tower Road Louisville, KY 40219
- Cbi Na-Con, Inc., 4795 Old Peachtree Road Norcross, GA 30091
- Faith, Inc., P. O. Box 1353 636 US Hwy. 41A Henderson, KY 42420
- Jeff Oakley Mid South Tank Consultants, Steve Drive P. O. Box 7104 Paducah, Ky. 42002-7104
- Phoenix Fabricators, Inc., 110 South Griswold Road Indianapolis, IN 46234
- Pittsburg Tank & Tower Company, P. O. Box 1349 Henderson, Ky 42420
- Pittsburg-Des Moines, 3400 Grand Avenue Neville Island Pittsburg, PA 15225

If you have any questions, or need additional information, do not hesitate to contact me.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.



Rod H. Martin, P. E.

RHM:as

cc: Brad Davis, Purchase Area Development District

SIGN-IN SHEET

OWNER: HICKORY WATER DISTRICT

ENGINEER: HUNTER MARTIN & ASSOCIATES, INC.
3220 Lone Oak Road
Paducah, KY 42003PROJECT: 1998 INDUSTRIAL PARK WATER
SYSTEM IMPROVEMENTS -
CONTRACTS A & BBID OCTOBER 16, 1998
OPENING: 10:00 A.M., CDT

NAME	COMPANY	TELEPHONE	CONTRACT	
			A	B
Kevin Heggard	Rh. Persons Const. Inc	573-686-1323	✓	
Anthony Workman	Top Grade Exc.	502-683-5799	✓	
James R. Holt	Kelly-Wilmore	502-683-6995	✓	
Steve Buzen	TILFORD CONTRACTORS	502 443 7308	✓	
Kit A. Allen	Wahls Exc.	502 442-7531	✓	
Kevin Bowman	Murtec, Inc.	502 444-0679	✓	
Furry Shiner	TERRY LAND	502 642-2149	✓	
Jennifer Patterson	Utility Pipe Sales	502-441-7276	Supplier	

HICKORY WATER DISTRICT
 GRAVES COUNTY, KY.
 1998 INDUSTRIAL PARK
 WATER SYSTEM IMPROVEMENTS
 CONTRACT "A"

BID TABULATION
 OCTOBER 16, 1998
 10:00 A.M., CDT
 HUNTER MARTIN & ASSOCIATES, INC.
 3320 LONE OAK ROAD
 PADUCAH, KY. 42003
 PHONE: (502) 554-2737

ITEM	DESCRIPTION	QUANTITY	UNIT	BURGESS CONSTRUCTION		WAHL'S EXCAVATING & UNDERGROUND, INC.		KEN TRACTORS CONSTRUCTION CO.		TOP GRADE EXCAVATING, INC.		TRIFORD CONTRACTORS, INC.		R. L. PENTONS CONSTRUCTION, INC.	
				UNIT PRICE BID	AMOUNT	BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/ DEMOBILIZATION	1	LS	\$6,000.00	\$6,000.00	\$7,000.00	\$7,000.00	\$11,892.95	\$11,892.95	\$10,000.00	\$10,000.00	\$6,568.00	\$6,568.00	\$4,000.00	\$4,000.00
2.	WATER MAINS, PVC	9,200	LF	\$8.70	\$80,040.00	\$9.56	\$87,952.00	\$11.40	\$104,880.00	\$10.00	\$92,000.00	\$11.78	\$108,376.00	\$11.54	\$106,168.00
2.1	12" SDR 21	250	LF	\$6.00	\$1,500.00	\$6.65	\$1,662.50	\$7.50	\$1,875.00	\$6.00	\$1,500.00	\$8.73	\$2,182.50	\$7.80	\$1,950.00
2.2	8" SDR 21	100	LF	\$4.00	\$400.00	\$5.63	\$563.00	\$4.25	\$425.00	\$6.00	\$600.00	\$7.17	\$717.00	\$6.70	\$670.00
2.3	6" SDR 21														
3.	FITTINGS	4,850	LBS.	\$2.00	\$9,700.00	\$2.00	\$9,700.00	\$2.55	\$12,367.50	\$1.00	\$4,850.00	\$1.76	\$8,536.00	\$1.40	\$6,790.00
3.1	Ductile Iron, 12" Size	300	LBS.	\$2.00	\$600.00	\$2.75	\$825.00	\$2.55	\$765.00	\$1.00	\$300.00	\$1.76	\$528.00	\$1.40	\$420.00
3.2	Ductile Iron, 8" Size	300	LBS.	\$2.00	\$600.00	\$3.00	\$900.00	\$2.55	\$765.00	\$1.00	\$300.00	\$1.76	\$528.00	\$1.40	\$420.00
3.3	Ductile Iron, 6" Size														
4.	VALVES, W/IRON BOX														
4.1	12" Gate	5	EA.	\$985.00	\$4,925.00	\$1,000.00	\$5,000.00	\$950.00	\$4,750.00	\$1,500.00	\$7,500.00	\$1,138.31	\$5,691.55	\$1,180.00	\$5,900.00
4.2	8" Gate	2	EA.	\$560.00	\$1,120.00	\$707.00	\$1,414.00	\$750.00	\$1,500.00	\$700.00	\$1,400.00	\$676.85	\$1,353.70	\$680.00	\$1,360.00
4.3	6" Gate	9	EA.	\$380.00	\$3,420.00	\$541.00	\$4,869.00	\$350.00	\$3,150.00	\$400.00	\$3,600.00	\$520.21	\$4,681.89	\$500.00	\$4,500.00
5.	SPECIAL FITTINGS, TAPPING TEE														
5.1	12" x 12" x 12" W/12" Valve	1	EA.	\$3,310.00	\$3,310.00	\$5,000.00	\$5,000.00	\$2,921.80	\$2,921.80	\$3,200.00	\$3,200.00	\$3,706.92	\$3,706.92	\$3,900.00	\$3,900.00
6.	CLAMPS AND COUPLINGS														
6.1	12"	2	EA.	\$90.00	\$180.00	\$200.00	\$400.00	\$425.00	\$850.00	\$400.00	\$800.00	\$220.08	\$440.16	\$200.00	\$400.00
7.	TIE-INS														
7.1	12"	1	EA.	\$400.00	\$400.00	\$500.00	\$500.00	\$3,200.00	\$3,200.00	\$2,000.00	\$2,000.00	\$1,366.64	\$1,366.64	\$1,000.00	\$1,000.00
7.2	12"	1	EA.	\$400.00	\$400.00	\$500.00	\$500.00	\$1,000.00	\$1,000.00	\$2,000.00	\$2,000.00	\$1,353.48	\$1,353.48	\$1,000.00	\$1,000.00
7.3	8"	1	EA.	\$375.00	\$375.00	\$500.00	\$500.00	\$1,000.00	\$1,000.00	\$2,000.00	\$2,000.00	\$1,340.40	\$1,340.40	\$980.00	\$980.00
8.	FIRE HYDRANTS	6	EA.	\$950.00	\$5,700.00	\$1,995.00	\$11,970.00	\$934.40	\$5,606.40	\$1,600.00	\$9,600.00	\$1,400.00	\$8,400.00	\$2,030.00	\$12,300.00
9.	AIR RELEASE VALVES W/BOX	1	EA.	\$350.00	\$350.00	\$1,500.00	\$1,500.00	\$650.00	\$650.00	\$1,100.00	\$1,100.00	\$1,078.86	\$1,078.86	\$950.00	\$950.00
10.	BORER W/CASING	120	LF	\$75.00	\$9,000.00	\$80.00	\$9,600.00	\$82.80	\$9,936.00	\$125.00	\$15,000.00	\$84.20	\$10,104.00	\$118.00	\$14,160.00
10.1	18" Casing														
11.	CRUSHED STONE	100	CY	\$17.00	\$1,700.00	\$20.00	\$2,000.00	\$15.00	\$1,500.00	\$30.00	\$3,000.00	\$25.00	\$2,500.00	\$16.00	\$1,600.00

HICKORY WATER DISTRICT
 GRAVES COUNTY, KY.
 1998 INDUSTRIAL PARK
 WATER SYSTEM IMPROVEMENTS
 CONTRACT "A"

BID TABULATION

BID OPENING: OCTOBER 16, 1998
 10:00 A.M., CDT
TIME:
PLACE: HUNTER MARTIN & ASSOCIATES, INC.
 3120 LONE OAK ROAD
 PADUCAH, KY. 42003
 PHONE: (502) 554-2737

Murco, Inc.
 815 Abell Street
 Paducah, KY 42003
 (502) 444-0879

Terry Land Development,
 Inc.
 P. O. Box 578
 Cunningham, KY 42035
 (502) 842-2149

Kelly & Wilmore Co., Inc.
 2701 Green River Drive
 Owensboro, KY 42302
 (502) 683-6995

ITEM	DESCRIPTION	QUANTITY	UNIT	MURCO, INC.		TERRY LAND DEVELOPMENT, INC.		KELLY & WILMORE CO., INC.	
				UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/ DEMOBILIZATION	1	LS	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00	\$13,500.00	\$13,500.00
2.	WATER MAINS, PVC								
2.1	12" SDR 21	9,200	LF	\$14.00	\$128,800.00	\$15.00	\$138,000.00	\$18.65	\$171,580.00
2.2	8" SDR 21	250	LF	\$10.00	\$2,500.00	\$11.55	\$2,887.50	\$18.00	\$4,500.00
2.3	6" SDR 21	100	LF	\$6.80	\$680.00	\$23.50	\$2,350.00	\$17.50	\$1,750.00
3.	FITTINGS								
3.1	Ductile Iron, 12" Size	4,850	LBS.	\$2.60	\$12,610.00	\$2.25	\$10,912.50	\$2.00	\$9,700.00
3.2	Ductile Iron, 8" Size	300	LBS.	\$2.50	\$750.00	\$2.75	\$825.00	\$3.00	\$900.00
3.3	Ductile Iron, 6" Size	300	LBS.	\$2.50	\$750.00	\$2.75	\$825.00	\$3.00	\$900.00
4.	VALVES, W/IRON BOX								
4.1	12" Gate	5	EA.	\$1,000.00	\$5,000.00	\$1,405.36	\$7,027.80	\$1,850.00	\$9,250.00
4.2	8" Gate	2	EA.	\$575.00	\$1,150.00	\$978.09	\$1,957.38	\$1,650.00	\$3,300.00
4.3	6" Gate	9	EA.	\$425.00	\$3,825.00	\$562.56	\$5,063.04	\$1,575.00	\$14,175.00
5.	SPECIAL FITTINGS, TAPPING TEE								
5.1	12" x 12" x 12" W/12" Valve	1	EA.	\$3,600.00	\$3,600.00	\$4,200.00	\$4,200.00	\$2,500.00	\$2,500.00
6.	CLAMPS AND COUPLINGS								
6.1	12"	2	EA.	\$300.00	\$600.00	\$500.00	\$1,000.00	\$2,100.00	\$4,200.00
7.	TIE-INS								
7.1	Tank	1	EA.	\$400.00	\$400.00	\$1,314.79	\$1,314.79	\$2,500.00	\$2,500.00
7.2	12"	1	EA.	\$400.00	\$400.00	\$1,230.55	\$1,230.55	\$2,500.00	\$2,500.00
7.3	8"	1	EA.	\$350.00	\$350.00	\$1,222.84	\$1,222.84	\$2,500.00	\$2,500.00
8.	FIRE HYDRANTS								
		6	EA.	\$1,000.00	\$6,000.00	\$2,246.31	\$13,477.86	\$2,750.00	\$16,500.00
9.	AIR RELEASE VALVES W/BOX								
		1	EA.	\$1,000.00	\$1,000.00	\$1,798.21	\$1,798.21	\$1,750.00	\$1,750.00
10.	BORB W/CASING								
10.1	18" Casing	120	LF	\$83.00	\$9,960.00	\$90.00	\$10,800.00	\$175.00	\$21,000.00
11.	CRUSHED STONE								
		100	CY	\$21.00	\$2,100.00	\$25.00	\$2,500.00	\$35.00	\$3,500.00

ITEM	DESCRIPTION	QUANTITY	UNIT	Burgess Construction		Wah's Excavating & Underground, Inc.		Ken Tractors Construction		Top Grade Excavating, Inc.		Tilford Contractors, Inc.		R. L. Parsons Construction, Inc.	
				UNIT PRICE BID	AMOUNT	BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT
BID OPENING: OCTOBER 16, 1998 TIME: 10:00 A.M., CDT PLACE: HUNTER MARTIN & ASSOCIATES, INC. 3320 LONE OAK ROAD PADUCAH, KY. 42003 PHONE: (502) 554-3737															
12.	CONCRETE ENCASEMENT	20	LF	\$40.00	\$800.00	\$35.00	\$700.00	\$70.00	\$1,400.00	\$10.00	\$200.00	\$17.50	\$350.00	\$75.00	\$1,500.00
13.	ASPHALT PAVEMENT REPLACEMENT	20	SY	\$15.00	\$300.00	\$100.00	\$2,000.00	\$20.00	\$400.00	\$50.00	\$1,000.00	\$60.00	\$1,200.00	\$40.00	\$800.00
14.	CONCRETE PAVEMENT REPLACEMENT	4	CY	\$120.00	\$480.00	\$250.00	\$1,000.00	\$150.00	\$600.00	\$100.00	\$400.00	\$200.00	\$800.00	\$245.00	\$980.00
15.	ELEVATED TANK GENERAL	1	LS	\$21,760.00	\$21,760.00	\$18,000.00	\$18,000.00	\$20,803.50	\$20,803.50	\$40,000.00	\$40,000.00	\$37,815.35	\$37,815.35	\$28,000.00	\$28,000.00
16.	CHECK VALVE REMOVAL	1	LS	\$1,200.00	\$1,200.00	\$2,500.00	\$2,500.00	\$1,600.00	\$1,600.00	\$1,000.00	\$1,000.00	\$862.04	\$862.04	\$1,200.00	\$1,200.00
17.	LOWES MASTER METER	1	LS	\$20,800.00	\$20,800.00	\$15,500.00	\$15,500.00	\$19,718.32	\$19,718.32	\$11,000.00	\$11,000.00	\$15,450.10	\$15,450.10	\$25,000.00	\$25,000.00
TREATMENT BUILDING															
18.	ADDITION														
18.1	Building Improvements	1	LS	\$31,200.00	\$31,200.00	\$12,320.00	\$12,320.00	\$31,210.00	\$31,210.00	\$9,200.00	\$9,200.00	\$25,385.13	\$25,385.13	\$28,000.00	\$28,000.00
18.2	Pumps	1	LS	\$9,250.00	\$9,250.00	\$11,500.00	\$11,500.00	\$7,600.00	\$7,600.00	\$13,800.00	\$13,800.00	\$11,770.37	\$11,770.37	\$12,600.00	\$12,600.00
18.3	Electrical	1	LS	\$13,350.00	\$13,350.00	\$9,300.00	\$9,300.00	\$8,306.91	\$8,306.91	\$11,500.00	\$11,500.00	\$8,828.60	\$8,828.60	\$9,400.00	\$9,400.00
18.4	Pipe and Valves	1	LS	\$10,000.00	\$10,000.00	\$35,015.00	\$35,015.00	\$12,500.00	\$12,500.00	\$17,250.00	\$17,250.00	\$20,349.96	\$20,349.96	\$26,000.00	\$26,000.00
18.5	Site Work and Parking Area	1	LS	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,500.00	\$1,500.00	\$5,000.00	\$5,000.00	\$3,000.00	\$3,000.00	\$2,800.00	\$2,800.00
18.6	Miscellaneous	1	LS	\$500.00	\$500.00	\$1,200.00	\$1,200.00	\$1,500.00	\$1,500.00	\$5,000.00	\$5,000.00	\$2,000.00	\$2,000.00	\$0.00	\$0.00
TOTAL ITEM 18					\$65,300.00		\$70,335.00		\$62,616.91		\$62,750.00		\$71,334.06		\$78,800.00
TREATMENT BUILDING															
19.	RADIO CONTROLS														
19.1	Lowes Tank/Flow Valve	1	LS	\$14,500.00	\$14,500.00	\$16,700.00	\$16,700.00	\$15,089.27	\$15,089.27	\$20,000.00	\$20,000.00	\$16,036.90	\$16,036.90	\$15,000.00	\$15,000.00
19.2	Industrial Park Tank/H.S. Pumps	1	LS	\$21,200.00	\$21,200.00	\$19,950.00	\$19,950.00	\$17,954.15	\$17,954.15	\$20,000.00	\$20,000.00	\$21,674.40	\$21,674.40	\$18,000.00	\$18,000.00
TOTAL BASE BID					\$276,260.00		\$298,540.50		\$309,216.80		\$317,100.00		\$334,975.95		\$337,748.00

ITEM	DESCRIPTION	QUANTITY	UNIT	Murtco, Inc.		Terry Land Development, Inc.		Kelly & Wilmore Co., Inc.	
				UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT
BID OPENING: OCTOBER 16, 1998 TIME: 10:00 A.M., CDT PLACE: HUNTER MARTIN & ASSOCIATES, INC. 3320 LONE OAK ROAD PADUCAH, KY. 42003 PHONE: (502) 554-3737									
12.	CONCRETE ENCASERMENT	20	LF	\$36.00	\$720.00	\$50.00	\$1,000.00	\$25.00	\$500.00
13.	ASPHALT PAVEMENT REPLACEMENT	20	SY	\$30.00	\$600.00	\$225.00	\$4,500.00	\$80.00	\$1,600.00
14.	CONCRETE PAVEMENT REPLACEMENT	4	CY	\$200.00	\$800.00	\$200.00	\$800.00	\$115.00	\$460.00
15.	ELEVATED TANK GENERAL	1	LS	\$26,000.00	\$26,000.00	\$13,460.00	\$13,460.00	\$31,500.00	\$31,500.00
16.	CHECK VALVE REMOVAL	1	LS	\$1,800.00	\$1,800.00	\$2,000.00	\$2,000.00	\$850.00	\$850.00
17.	LOWES MASTER METER	1	LS	\$11,460.00	\$11,460.00	\$15,404.44	\$15,404.44	\$29,750.00	\$29,750.00
TREATMENT BUILDING									
18.	ADDITION								
18.1	Building Improvements	1	LS	\$27,000.00	XXXXXX	\$24,696.40	XXXXXX	\$45,000.00	XXXXXX
18.2	Pumps	1	LS	\$15,500.00	XXXXXX	\$12,704.36	XXXXXX	\$14,800.00	XXXXXX
18.3	Electrical	1	LS	\$5,000.00	XXXXXX	\$8,828.60	XXXXXX	\$10,675.00	XXXXXX
18.4	Pipe and Valves	1	LS	\$23,800.00	XXXXXX	\$33,104.80	XXXXXX	\$26,950.00	XXXXXX
18.5	Site Work and Parking Area	1	LS	\$4,500.00	XXXXXX	\$2,000.00	XXXXXX	\$5,750.00	XXXXXX
18.6	Miscellaneous	1	LS	\$3,000.00	XXXXXX	\$10,000.00	XXXXXX	\$4,000.00	XXXXXX
TOTAL ITEM 18					\$78,800.00		\$91,334.36		\$107,175.00
RADIO CONTROLS									
19.1	Lowes Tank/Flow Valve	1	LS	\$16,500.00	\$16,500.00	\$16,036.90	\$16,036.90	\$19,390.00	\$19,390.00
19.2	Industrial Park Tank/H.S. Pumps	1	LS	\$24,000.00	\$24,000.00	\$19,081.70	\$19,081.70	\$23,072.00	\$23,072.00
TOTAL BASE BID					\$346,155.00		\$381,009.87		\$500,802.00

I hereby state that this BID TABULATION was made under my supervision and is true and accurate to the best of my knowledge and belief.

Given under my hand and seal this 19th day of October, 1998.

Ray H. Martin
 Ray H. Martin, P. E. No. 10,846

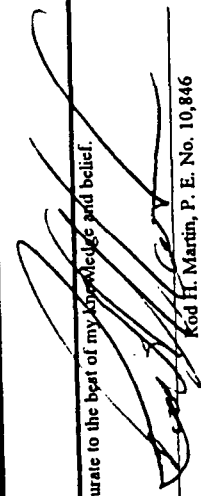
HICKORY WATER DISTRICT
 GRAVES COUNTY, KY.
 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS
 CONTRACT "B"

BID TABULATION

ITEM	DESCRIPTION	QUANTITY	UNIT	CALDWELL TANKS, INC. P. O. Box 35770 Louisville, KY 40232-5770		PHOENIX FABRICATORS AND ERECTORS, INC. P. O. Box 34410 Indianapolis, IN 46234-0410		PITTSBURG TANK & TOWER CO., INC. P. O. Box 913 Henderson, KY 42419	
				UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT
1.	500,000 GALLON ELEVATED TANK								
1.1	Foundation	1	LS	\$65,000.00	XXXXXX	\$62,000.00	XXXXXX	\$118,000.00	XXXXXX
1.2	Prefabrication	1	LS	\$231,600.00	XXXXXX	\$298,724.00	XXXXXX	\$365,337.00	XXXXXX
1.3	Erection	1	LS	\$115,000.00	XXXXXX	\$199,149.00	XXXXXX	\$80,000.00	XXXXXX
1.4	Cathodic Protection	1	LS	\$7,000.00	XXXXXX	\$9,000.00	XXXXXX	\$10,000.00	XXXXXX
1.5	Painting	1	LS	\$62,000.00	XXXXXX	\$60,000.00	XXXXXX	\$59,725.00	XXXXXX
	SUBTOTAL - NEW ELEVATED TANK			XXXXXX	\$480,600.00	XXXXXX	\$628,873.00	XXXXXX	\$633,062.00
2.	ABANDON EXISTING HWY. 121 PEDESHERE	1	LS	\$15,000.00		\$15,000.00		\$18,725.00	
	TOTAL BASE BID				\$495,600.00		\$643,873.00		\$651,787.00

I hereby state that this BID TABULATION was made under my supervision and is true and accurate to the best of my knowledge and belief.

Given under my hand and seal this 19th day of October, 1998.



Kod H. Martin, P. E. No. 10,846

NOTICE OF AWARD - CONTRACT "A" (SUBJECT TO PSC APPROVAL)

TO: BURGESS CONSTRUCTION
78 EDEN BAY DRIVE
EDDYVILLE, KY 42038

PROJECT DESCRIPTION: 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVE-
MENTS (BOOSTER PUMP STATION AND MAINS) -
CONTRACT "A"

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated SEPTEMBER 17, 1998, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ 276,260.00.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and Certificates of Insurance within 10 calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within 10 days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this 17TH day of FEBRUARY, 19 99.

*THE REQUIREMENT FOR EXECUTION OF THE AGREEMENT AND FURNISHING OF THE CONTRACTOR'S P & P BONDS AND CERTIFICATES OF INSURANCE IS DELAYED UNTIL APPROVAL IS RECEIVED FROM PSC.

HICKORY WATER DISTRICT
OWNER
BY: Robert H. Sullivan
TITLE: ROBERT H. SULLIVAN, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by BURGESS CONSTRUCTION
this the 25 day of FEBRUARY, 19 99.

BY: David Burgess
TITLE: DAVID BURGESS, OWNER

Burgess Construction
78 Eden Bay Dr.
Eddyville, Ky. 42038

February 16, 1999

Mr. Robert H. Sullivan, Chairman
Hickory Water District
P. O. Box 128
Hickory, Ky. 42051

Dear Mr. Sullivan:

RE: Hickory Water District (1998 Industrial Park Water Improvements
Booster Pump Station and Mains - Contract A)

Per your request, this is to advise that we will extend the hold period for our Bid dated
October 16, 1998, an additional 60 days.

We understand that any work completed on this project prior to the execution of
contracts will be at our risk.

If you have any questions, please advise.

Yours very truly,

BURGESS CONSTRUCTION



David Burgess, Owner

cc: Mr. Rod H. Martin, P.E., Hunter Martin & Associates, Inc., Paducah

NOTICE OF AWARD CONTRACT "B" (SUBJECT TO PSC APPROVAL)

TO: CALDWELL TANKS, INC.
4000 TOWER ROAD
LOUISVILLE, KY 40219

PROJECT DESCRIPTION: 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVE-
MENTS (500,000 GALLON ELEVATED TANK) -
CONTRACT "B"

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated SEPTEMBER 17, 1998, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ 495,600.00

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and Certificates of Insurance within 10 calendar days from the date of this Notice to you.*

If you fail to execute said Agreement and to furnish said BONDS within 10 days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this 17TH day of FEBRUARY, 19 99.

*THE REQUIREMENT FOR EXECUTION OF THE AGREEMENT AND FURNISHING OF THE CONTRACTOR'S P & P BONDS AND CERTIFICATES OF INSURANCE IS DELAYED UNTIL APPROVAL IS RECEIVED FROM PSC.

HICKORY WATER DISTRICT
OWNER
BY: Robert H. Sullivan
TITLE: ROBERT H. SULLIVAN, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by CALDWELL TANKS, INC. this the 1st day of March, 19 99.

BY: David L. Dues
TITLE: Vice President

February 15, 1999

Hunter, Martin & Associates, Inc.
Attn: Mr. Rod H. Martin, P.E.
3220 Lone Oak Road
Paducah, Kentucky 42003

**RE: 1998 Industrial Park Water System Improvements
Contract B
Hickory Water District
500,000 Gallon Elevated Storage Tank**

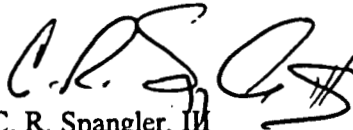
Dear Mr. Martin:

As requested, we will be happy to extend the hold period for our bid dated October 16, 1998, an additional 60 days.

At this time, I would like to request four sets of project plans and specifications for our use to assign individual project tasks. We understand that any work completed on this project prior to the execution of contracts will be at our risk. Your attention to this matter will be greatly appreciated.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,


C. R. Spangler, III
Regional Sales Manager



NOTICE OF CHANGE IN RATES

In accordance with the requirements of the Public Service Commission of Kentucky as set out in 807 KAR 5:001, Section 10, notice is hereby given that the Hickory Water District of Graves County, Kentucky, will be filing with the Public Service Commission of Kentucky at their offices in Frankfort, Kentucky, a petition for issuance of a Certificate Of Public Convenience and Necessity.

Notice is also hereby given to the customers of the Hickory Water District that an application for a proposed increase in rates is being concurrently filed with the Public Service Commission. The new rates are necessary to cover the increased indebtedness.

A comparison of the existing and proposed rates, as well as the amount of change requested in the rates for each bracket of use, is as follows:

HICKORY WATER DISTRICT							
			BASIS OF CHARGE	PRESENT CHARGE	PROPOSED CHARGE	AMOUNT OF INCREASE	PERCENT INCREASE
First	2,000	Gallons	MINIMUM	\$6.50	\$7.90	\$1.40	21.54%
Next	3,000	Gallons	/1000 GALS.	\$2.70	\$3.65	\$0.95	35.19%
Next	5,000	Gallons	/1000 GALS.	\$2.00	2.90	\$0.90	45.00%
Next	10,000	Gallons	/1000 GALS.	\$1.65	2.40	\$0.75	45.45%
Next	30,000	Gallons	/1000 GALS.	\$1.20	1.75	\$0.55	45.83%
Next	50,000	Gallons	/1000 GALS.	\$0.85	1.25	\$0.40	47.06%
Over	100,000	Gallons	/1000 GALS.	\$0.70	1.00	\$0.30	42.86%

The new rates will increase (1) the total revenue generated from the District by 32.25%; (2) the minimum monthly charge for Hickory Water District customers by 21.54%; and (3) the average Hickory Water District bill for 6,200 gallons per month by 31.35%.

Pursuant to the rules governing tariffs, Hickory Water District will be filing the following Tariff Sheets: PSC No. 4, Second Sheet No. 1 Canceling PSC No. 2, Revised Sheet No. 1; and PSC No. 4, Second Sheet No. 2 Canceling PSC No. 2, Revised Sheet No. 2.

The rates contained in this Notice are the rates proposed by Hickory Water District. However, the Public Service Commission may order rates to be charged that differ from these proposed rates. Such action may result in rates for customers other than the rates included in this Notice.

Any corporation, association, body politic or person may request leave to intervene by motion within 30 days after notice of the proposed changes in rates is given. The motion shall be submitted to the Public Service Commission, 730 Schenkel Lane, P. O. Box 615, Frankfort, Kentucky 40602, and shall set forth the grounds for the request including the status and interest of the party. Intervenor may obtain copies of the application and testimony by contacting the Hickory Water District's office at P. O. Box 128, Hickory, KY. 42051 during regular office hours. A copy of the application and testimony shall be available for public inspection at the Water District's office.

Robert H. Sullivan, Chairman
Hickory Water District
February 15, 1999

Paste copy of advertisement on this margin.

PROOF OF PUBLICATION

Mayfield, KY

In Account With

The Mayfield Messenger

Mayfield, KY

Title of Advertising:

Legal

3x7 1/2 @ 5.59	22 1/2"	\$125.78
3x7 1/2 @ 5.59	22 1/2"	\$125.78
3x7 1/2 @ 5.59	22 1/2"	\$125.78
Total	67 1/2"	\$377.34

Personally appeared before me, Eric Hoffman, Publisher of The Mayfield Messenger, a daily newspaper published in Mayfield, Graves County, Kentucky, and on his oath says that the above are the true charges for advertising, which appeared in The Mayfield Messenger on the following dates:

2-18-99, 2-25-99, 3-4-99

Signed

Eric Hoffman

Publisher of The Mayfield Messenger

Subscribed and sworn to before me, Carolyn Williams, a Notary Public in Mayfield, Graves County, Kentucky, by Eric Hoffman this

Signed

Carolyn Williams

My Commission Expires

MY COMMISSION EXPIRES AUGUST 12, 2001

Post-it® Fax Note	7671	Date	3-8-99	Pages	2
To	Hunter Martin	From	Mayfield		
Co./Dept.	+ Assoc.	Co.	Messenger		
Phone #		Phone #	247-5223		
Fax #		Fax #			

813 Paris Rd. 247-6765

•INCOME TAX

File Electronically & Receive Your Refund Faster!

•COMPUTERIZED BOOKKEEPING

•QUARTERLY REPORTS

Mon.-Fri. 8-5; Sat. 8-Noon

or by appointment

- WALK-INS WELCOME -

Shirley & Don Kerr

247-1094.

WELLS CARGO- box trailer, 22', lined, excellent condition, \$3000. Call 247-7433.

WHITE & GOLD CHANDELIER, \$20
Beanie Baby display cases, seamless plastic, \$3/each. Call 247-8727.

376-2357 or 247-6376.

WHITE KITCHEN- table with light colored wood top & 4 chairs, good condition, \$150. Call 247-2779 after 5 PM.

SOLID OAK- round pedestal table, 2 leaves, \$250. Call 674-5824.

B2150, 4 wheel drive, Kubota tractor, 223 hours. Call collect, 502/674-5893.

180 Sports Equipment

MOSSBERG 12- Gauge turkey gun, \$269.96. Jerry's Sporting Goods, 6th & Walnut, 247-4704.

ROOF
warran
rubber.
8680/tn

KALI & COM
water,
gutter
repair,
free as
Page:
NEW!
Upgrac
South
COMPI

Heat
No Sa
dersok

FURN
Relini
Route
Young

FUTR
remov
grindi
Call 5

COM
KY G
Cunn
nett, 5

W. D.
down
\$10/n
247-5

G.

NK
3/4"
\$45 r
7
HVAI

Also

...

rem
568;

G
& w
lip 5

ref
512
247

NOTICE OF CHANGE IN RATES

In accordance with the requirements of the Public Service commission of Kentucky as set out in 807 KAR 5:001, Section 10, notice is hereby given that the Hickory Water District of Graves County, Kentucky, will be filing with the Public Service Commission of Kentucky at their offices in Frankfort, Kentucky, a petition for issuance of a Certificate of Public Convenience and Necessity.

Notice is also hereby given to the customers of the Hickory Water District that an application for a proposed increase in rates is being concurrently filed with the Public Service Commission. The new rates are necessary to cover the increased indebtedness.

A comparison of the existing and proposed rates, as well as the amount of change requested in the rates for each bracket of use, is as follows:

HICKORY WATER DISTRICT

	BASIS OF CHARGE	PRESENT CHARGE	PROPOSED CHARGE	AMOUNT OF INCREASE	PERCENT INCREASE	
First	2,000 Gallons	MINIMUM	\$6.50	\$7.90	\$1.40	21.54%
Next	3,000 Gallons	/1000 GALS.	\$2.70	\$3.85	\$0.95	35.19%
Next	5,000 Gallons	/1000 GALS.	\$2.00	\$2.90	\$0.90	45.00%
Next	10,000 Gallons	/1000 GALS.	\$1.65	\$2.40	\$0.75	45.45%
Next	30,000 Gallons	/1000 GALS.	\$1.20	\$1.75	\$0.55	45.83%
Next	50,000 Gallons	/1000 GALS.	\$0.85	\$1.25	\$0.40	47.06%
Over	100,000 Gallons	/1000 GALS.	\$0.70	\$1.00	\$0.30	42.86%

The new rates will increase (1) the total revenue generated from the District by 32.25%; (2) the minimum monthly charge for Hickory Water District customers by 21.54%; and (3) the average Hickory Water District bill for 6,200 gallons per month by 31.35%.

Pursuant to the rules governing tariffs, Hickory Water District will be filing the following Tariff sheets: PSC No. 4, Second Sheet No. 1 Canceling PSC No. 2, Revised Sheet No. 1; and PSC No. 4, Second Sheet No. 2 Canceling PSC No. 2, Revised Sheet No. 2.

The rates contained in this Notice are the rates proposed by Hickory Water District. However, the Public Service Commission may order rates to be charged that differ from these proposed rates. Such action may result in rates for customers other than the rates included in this Notice.

Any corporation, association, body politic or person may request leave to intervene by motion within 30 days after notice of the proposed changes in rates is given. The motion shall be submitted to the Public Service Commission, 730 Schenkel Lane, P.O. Box 615, Frankfort, Kentucky 40602, and shall set forth the grounds for the request including the status and interest of the party. Interveners may obtain copies of the application and testimony by contacting the Hickory Water District's office at P.O. Box 128, Hickory, KY 42051 during regular office hours. A copy of the application and testimony shall be available for public inspection at the Water District's office.

Robert H. Sullivan, Chairman
Hickory Water District
February 15, 1999

IS YOUR HOME SAFE??

IS YOUR HOME INSURED AGAINST FIRE, TORNADOES, OR OTHER ACTS OF MOTHER NATURE? THEN WHY NOT BE PROTECTED FROM THE **"TWO"** LEADING CASES OF HOME DETERIORATION???

#1: TERMITES

Termites do more damage to homes than fires, hurricanes and tornadoes combined.

#2: MOISTURE

Excessive moisture rising from the ground beneath the home causes wet rot, sweating windows, mold, musky odor, mildew and much more.

For more information call
SERVALL TERMITES & PEST CONTROL
(502) 753-8433 or
1-800-264-1433

HICKORY WATER DISTRICT

P.O. BOX 128
HICKORY, KY 42051

January 23, 1999

Dear Customer:

In the next few days the Hickory Water District will advertise in the local newspaper our intent to raise the water rates for the Hickory Water District. In the 30 year history of the water district we have been very fortunate in our ability to limit the water rate increases to only two (2), the last being in 1991.

In 1995 the Public Service Commission cited us for being in violation of Commission Regulation 807 KAR 5:066, Section 4 (4) for failure to have a constant 24 hour water storage availability. The requirement for additional water storage is due to rapid growth in the number and use of water customers. At that time, we requested and received an extension to December 31, 2000 to bring our system into compliance.

In the meantime, the Mayfield-Graves County Industrial Board purchased and implemented an Industrial Park at Hickory across from Seaboard. Since the Industrial Park created new jobs for this area, we were able to get a \$500,000 EDA grant and a \$528,000 KIA loan at 1.8% interest to build a new 500,000 gallon storage tank with associated additional water lines, pumps, and etc. for the Water District.

The Industrial Board deeded us the property on which the new water tank would be erected. The new water tank will bring us into compliance with the Public Service Commission on water storage as well as increasing the water pressure for the district thus better serving the residential and industrial customers.

The loan will require us to increase our water rates; however, we were very fortunate to get the grant and a loan at 1.8%; otherwise, the rate increase would have been greater.

Fortunately, the Hickory Water District has some of the lowest water district rates in Graves County. Area water district rates as provided by the districts are as follows:

<u>Water District</u>	<u>Minimum Rate for 2,000 Gallons</u>	<u>Minimum Rate for Maximum Usage</u>
Consumer	\$ 8.80	\$1.55 per thousand
Fancy Farm	\$13.10	\$2.70 per thousand
Hardeman	\$10.51	Not available
Sedalia	\$ 9.80	\$1.56 per thousand
South Graves	\$14.25	\$3.43 per thousand
Symsonia	\$10.25	\$2.05 per thousand

Our current minimum bill for 2,000 gallons is \$6.50 and we are proposing an increase to \$7.90 with our maximum users cost at a present rate of 70 cents per thousand with a proposed increase to \$1.00 per thousand.

In conclusion, your board of directors has attempted to operate this district as efficiently as possible; however, in this case we must propose a rate increase. The proposed water rates which will be published in the local newspaper may not be final rates. The Public Service Commission will review our proposed rates and they have the option of raising or lowering the proposed rates. In addition, each customer reserves the right to challenge the rates if they feel they are improper.

Finally, a great deal of time, consideration, outside advice and counsel has gone into this rate determination, and we feel the increases are the minimum required and are shared equally and fairly by all our customers.

Sincerely,

HICKORY WATER DISTRICT

BOARD OF COMMISSIONERS

Robert H. Sullivan, Chairman

Tommy C. Green, Secretary

Sam E. Davis, Jr., Treasurer

#45

98-082-2321
10-16-98

HICKORY WATER DISTRICT

GRAVES COUNTY, KENTUCKY

RECEIVED
MAR 10 1999
PUBLIC SERVICE
COMMISSION

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (BOOSTER PUMP STATION AND MAINS)

CONTRACT "A"

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS



[Handwritten Signature]

APRIL, 1998
(BID OCTOBER, 1998)

HUNTER MARTIN & ASSOCIATE
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD * PADUCAH, KY. 42003 * (502

EXHIBIT J1

HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS
CONTRACT "A"

* * * * *

TABLE OF CONTENTS

TITLE	PAGE NUMBERS
Advertisement for Bids - Contract "A"	AB-1
Information for Bidders - Contract "A"	IB-1 - IB-3
Bid - Contract "A"	B-1 - B-5
Bid Bond - Contract "A"	BB-1 - BB-2
Agreement - Contract "A"	A-1 - A-5
Performance Bond - Contract "A"	PE-1 - PE-3
Payment Bond - Contract "A"	PA-1 - PA-3
Notice of Award - Contract "A"	NA-1
Notice to Proceed - Contract "A"	NP-1
Change Order - Contract "A"	CO-1
General Conditions	GC-1 - GC-15
Supplemental General Conditions	SGC-1 - SGC-38
Special Conditions	SC-1 - SC-10
Wage Determination	SC-11 - SC-34
Technical Specifications:	
1 - Distribution System and Piping	1-1 - 1-10
3 - Concrete Work	3-1 - 3-4
6 - Building and Building Materials	6-1 - 6-2
7 - Pump Stations and Miscellaneous Equipment	7-1 - 7-4
8 - General Equipment Stipulation	8-1 - 8-2
9 - Electrical and Control Work	9-1 - 9-3
12 - Testing and Disinfecting	12-1 - 12-7
13 - Paints and Painting	13-1 - 13-4
14 - Associated Miscellaneous Work	14-1 - 14-5
Plans Sheets (Bound Separately)	Cover - 8

ADVERTISEMENT FOR BIDS - CONTRACT "A"

HICKORY WATER DISTRICT

STATE ROUTE 1241 NORTH

P. O. BOX 128

HICKORY, KY 42051

Separate sealed BIDS for the construction of **1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (BOOSTER PUMP STATION AND MAINS) - CONTRACT "A" (INCLUDING TWO CLOSE COUPLED CENTRIFUGAL PUMPS, CONTROLS, BUILDING ADDITION, 9,200 LF OF 12 INCH MAIN, ETC.**

will be received by **HICKORY WATER DISTRICT** at the office of **HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KY. 42003** until **10:00 A.M., CDT**, **FRIDAY**, **OCTOBER 16**, 19 **98**, and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

HUNTER MARTIN & ASSOCIATES, INC., PADUCAH, KENTUCKY

HICKORY WATER DISTRICT, HICKORY, KENTUCKY

ASSOCIATED GENERAL CONTRACTORS, PADUCAH, KENTUCKY

F. W. DODGE-CIG, EVANSVILLE, INDIANA

TRI-STATE CONSTRUCTION NEWS, EVANSVILLE, INDIANA

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$ **100.00** for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the payment, and any non-bidder or subbidder upon so returning the CONTRACT DOCUMENTS will be refunded \$ **50.00**.

The OWNER reserves the right to waive any informalities or to reject any or all bids.

Each BIDDER must deposit with his BID, security in the amount, form and subject to the conditions provided in the Information for Bidders.

No BIDDER may withdraw his BID within **90 Days** after the actual date of the opening thereof.

SEPTEMBER 17, 1998

DATE

ROBERT H. SULLIVAN, CHAIRMAN

TITLE

INFORMATION FOR BIDDERS - CONTRACT "A"

BIDS will be received by HICKORY WATER DISTRICT (herein called the "OWNER"), at HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KY. 42003 until 10:00 A.M., CDT, FRIDAY, OCTOBER 16, 1998, and then BIDS shall be opened publicly and read aloud.

Each BID must be submitted in a sealed envelope, addressed to the HICKORY WATER DISTRICT, c/o HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KY. 42003. Each sealed envelope containing a BID must be plainly marked on the outside as BID FOR "1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (BOOSTER PUMP STATION AND MAINS) - CONTRACT "A"" and the envelope shall bear on the outside the BIDDER'S name, address, and license number if applicable, and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to HICKORY WATER DISTRICT, c/o HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KY. 42003.

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required.

The OWNER may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 90 calendar days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

If requested, the OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve the CONTRACTOR from fulfilling any of the conditions of the contract.

Each BID shall be accompanied by a Bid Bond, payable to the OWNER, for 5 percent of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the BONDS of all except the three lowest responsible BIDDERS. When the Agreement is executed, the bonds of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the payment BOND and performance BOND have been executed and approved, after which it will be returned. A certified check may be used in lieu of a Bid Bond.

A PERFORMANCE BOND and a PAYMENT BOND, each in the amount of 100 percent of the CONTRACT PRICE with a corporate surety approved by the OWNER, shall be required for the faithful performance of the CONTRACT.

Attorneys-in-fact who sign BID BONDS, PAYMENT BONDS and PERFORMANCE BONDS must file with each BOND a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance BOND and payment BOND within 10 calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and BOND forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER within 10 calendar days of receipt of acceptable performance BOND, payment BOND and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by WRITTEN NOTICE withdraw the signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within 10 calendar days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the specified period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party. The CONTRACTOR shall commence work within 10 calendar days of receipt of the NOTICE TO PROCEED.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted.

Award will be made to the lowest responsible, responsive BIDDER.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to its BID.

The low bidder shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when required to do so by the OWNER.

The ENGINEER is HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KENTUCKY 42003, (PHONE 502, 554-2737; FAX 502, 554-2738).

An inspection for prospective BIDDERS will leave from the office of HICKORY WATER DISTRICT,
STATE ROUTE 1241 NORTH , HICKORY, KY. 42051 at 10:00 A.M., CDT , FRIDAY ,
OCTOBER 2 , 19 98 .

BID - CONTRACT "A"

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____

doing business as _____ (Insert "a corporation", "a partnership", or "an individual" as applicable.)

To HICKORY WATER DISTRICT, STATE ROUTE 1241 NORTH, P. O. BOX 128, HICKORY, KENTUCKY 42051 (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for the installation of 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (BOOSTER PUMP STATION AND MAINS) - CONTRACT "A" in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 180 consecutive calendar days thereafter plus 20 days for completion of Elevated Tank General if delayed by Tank Contractor (Contract B). BIDDER further agrees to pay as liquidated damages, the sum of \$ 500.00 for each consecutive calendar day thereafter.

BIDDER acknowledges receipt of the following ADDENDUM:

BIDDER, having examined the plans and specifications and being acquainted with and fully understanding (a) the extent and character of the work, (b) the location, arrangement and specified requirements, (c) existing and probable construction difficulties and hazards, (d) local conditions relative to labor, transportation, hauling and delivery, and (e) all other conditions affecting or which may be affected by the PROJECT hereby agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices and/or lump sums:

BID SCHEDULE

NOTE: BIDS SHALL INCLUDE SALES TAX AND ALL APPLICABLE TAXES AND FEES. SEE SPECIAL CONDITIONS FOR EXPLANATION OF BID ITEMS.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/ DEMOBILIZATION	1	LS		
2.	WATER MAINS, PVC				
2.1	12" SDR 21	9,200	LF		
2.2	8" SDR 21	250	LF		
2.3	6" SDR 21	100	LF		
3.	FITTINGS				
3.1	Ductile Iron, 12" Size	4,850	LBS.		
3.2	Ductile Iron, 8" Size	300	LBS.		
3.3	Ductile Iron, 6" Size	300	LBS.		
4.	VALVES, W/CAST IRON BOX				
4.1	12" Gate	5	EA.		
4.2	8" Gate	2	EA.		
4.3	6" Gate	9	EA.		
5.	SPECIAL FITTINGS, TAPPING TEE				
5.1	12" x 12" x 12" W/12" Valve	1	EA.		
6.	CLAMPS AND COUPLINGS				
6.1	12"	2	EA.		
7.	TIE-INS				
7.1	Tank	1	EA.		
7.2	12"	1	EA.		
7.3	8"	1	EA.		
8.	FIRE HYDRANTS	6	EA.		
9	AIR RELEASE VALVES W/BOX	1	EA.		
10.	BORE W/CASING				
10.1	18" Casing	120	LF		
11.	CRUSHED STONE	100	CY		
12.	CONCRETE ENCASEMENT	20	LF		
13.	ASPHALT PAVEMENT REPLACEMENT	20	SY		
14.	CONCRETE PAVEMENT REPLACEMENT	4	CY		
15.	ELEVATED TANK GENERAL	1	LS		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
16.	CHECK VALVE REMOVAL	1	LS		
17.	LOWES MASTER METER	1	LS		
18.	TREATMENT BUILDING ADDITION				
18.1	Building Improvements	1	LS		XXXXXX
18.2	Pumps	1	LS		XXXXXX
18.3	Electrical	1	LS		XXXXXX
18.4	Piping and Valves	1	LS		XXXXXX
18.5	Site Work and Parking Area	1	LS		XXXXXX
18.6	Miscellaneous	1	LS		XXXXXX
	TOTAL ITEM 18			XXXXXX	
19.	RADIO CONTROLS				
19.1	Lowes Tank/Flow Valve	1	LS		
19.2	Industrial Park Tank/H.S. Pumps	1	LS		
TOTAL BID - CONTRACT "A"					

NOTE: THE CONTRACT SHALL BE AWARDED BASED ON THE TOTAL BID. HOWEVER, IT IS AGREED THAT THE OWNER MAY ADJUST THE QUANTITIES TO MATCH AVAILABLE FUNDS.

RESPECTFULLY SUBMITTED THIS _____ DAY OF _____, 19 ____.

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? _____

FIRM NAME

SIGNATURE

FIRM ADDRESS

TITLE

LIST OF PARTNERS, OR CORPORATE OFFICERS WITH
TITLES IF APPLICABLE:

PHONE NUMBER

SEAL (IF APPLICABLE)

ATTEST: _____

TITLE

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246 AND 41 CFR PART 60-4)

The following Notice shall be included in, and shall be a part of all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000.

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for minority participation for each trade	Goals for female participation for each trade
------------	---	---

5.2 %

6.9 %

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a) and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of

meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed. The Contractor shall provide written notification to the appropriate Regional Office of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is HICKORY, GRAVES COUNTY, KENTUCKY.

BID BOND - CONTRACT "A"

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned, _____

_____ as Principal, and

_____ as Surety, are hereby held and firmly bound

unto HICKORY WATER DISTRICT

as Owner in the penal sum of _____

_____ for the payment of

which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this _____ day of _____, 19 ____ .

The Condition of the above obligation is such that whereas the Principal has submitted to HICKORY WATER DISTRICT a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (BOOSTER PUMP STATION AND MAINS) - CONTRACT "A"

NOW THEREFORE,

- (a) If said Bid shall be rejected, or
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid.

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal (L.S.)

By: _____

Surety

By: _____

IMPORTANT - Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located, and hold certificates of authority as acceptable sureties (31 CFR 223).

AGREEMENT - CONTRACT "A"

THIS AGREEMENT, made this _____ day of _____, 19 _____, by and between

HICKORY WATER DISTRICT, hereinafter called "OWNER" and

_____ doing business as

_____ hereinafter called "CONTRACTOR".

(an individual,) or (a partnership,) or (a corporation)

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the PROJECT described as 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (BOOSTER PUMP STATION AND MAINS) - CONTRACT "A".
2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the PROJECT described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will complete the same within 180 calendar days plus 20 days for completion of Elevated Tank General if delayed by Tank Contractor (Contract B) unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ _____, or as shown in the BID schedule.

5. The term "CONTRACT DOCUMENTS" means and includes the following:

(A) GENERAL CONTRACT DOCUMENTS

- (1) ADVERTISEMENT FOR BIDS
- (2) INFORMATION FOR BIDDERS
- (3) BID
- (4) BID BOND
- (5) AGREEMENT
- (6) PERFORMANCE BOND
- (7) PAYMENT BOND
- (8) NOTICE OF AWARD
- (9) NOTICE TO PROCEED
- (10) CHANGE ORDER
- (11) GENERAL CONDITIONS
- (12) SPECIAL CONDITIONS

(B) SPECIFICATIONS prepared by HUNTER MARTIN & ASSOCIATES, INC.
dated APRIL, 1998 (BID OCTOBER, 1998).

(C) DRAWINGS prepared or issued by HUNTER MARTIN & ASSOCIATES,
INC. dated APRIL, 1998 (BID OCTOBER, 1998).

(D) ADDENDA:

No. _____ dated _____ 19 _____

No. _____ dated _____ 19 _____

No. _____ dated _____ 19 _____

- 6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.
- 7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed by their duly authorized officials, this Agreement in FOUR copies each of which shall be deemed an original on the date first above written.

OWNER: HICKORY WATER DISTRICT

BY: _____

NAME: ROBERT H. SULLIVAN
(Please Type)

TITLE: CHAIRMAN

(Seal)

ATTEST:

BY: _____

NAME: _____
(Please Type)

TITLE: _____

CONTRACTOR:

BY:

NAME:

_____ (Please Type)

TITLE:

(Seal)

ATTEST:

BY:

NAME:

_____ (Please Type)

TITLE:

FORM ED-126
(7-69)

U.S. DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION

CERTIFICATE OF GRANTEE/BORROWER'S ATTORNEY

I, the undersigned, _____, the
duly authorized and acting legal representative of _____
_____, do hereby certify as
follows:

I have examined the attached contract(s) and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties there- to acting through their duly authorized representatives; that said repre- sentatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

Date: _____

PERFORMANCE BOND - CONTRACT "A"

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name Of Contractor)

(Address Of Contractor)

a _____ hereinafter called PRINCIPAL and
(Corporation, Partnership or Individual)

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

HICKORY WATER DISTRICT
(Name of Owner)

STATE ROUTE 1241 NORTH, P. O. BOX 128, HICKORY, KY 42051
(Address of Owner)

hereinafter called OWNER in the total aggregate penal sum of _____
_____ Dollars (\$ _____) in lawful money

of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 19_____, a copy of which is hereto attached and made a part hereof for the construction of:

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS
(BOOSTER PUMP STATION AND MAINS) - CONTRACT "A"

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one year guaranty period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the CONTRACT not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension, or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in FOUR counterparts, each of which shall be deemed an original, this _____ day of _____ 19 ____.

Number

ATTEST:

(SEAL)

Principal
By: _____ (s)

(Address)

Witness to Principal

Address

ATTEST:

Witness to Surety

Witness to Surety

(Address)

Surety
By: _____
Attorney-In-Fact

(Address)

NOTE: Date of BOND must not be prior to date of CONTRACT.
If CONTRACT is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

PAYMENT BOND - CONTRACT "A"

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name Of Contractor)

(Address Of Contractor)

a _____ hereinafter called PRINCIPAL and
(Corporation, Partnership or Individual)

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

HICKORY WATER DISTRICT

(Name of Owner)

STATE ROUTE 1241 NORTH, P. O. BOX 128, HICKORY, KY 42051

(Address of Owner)

hereinafter called OWNER and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of _____ Dollars (\$ _____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 19_____, a copy of which is hereto attached and made a part hereof for the construction of:

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS

(BOOSTER PUMP STATION AND MAINS) - CONTRACT "A"

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lien holder

whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: the PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer; (b) after the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in FOUR counterparts, each of which shall be deemed an original, this _____ day of _____ 19 ____.

ATTEST:

(SEAL)

Witness to Principal

Address

ATTEST:

Witness to Surety

(Address)

Principal

By: _____ (s)

(Address)

Surety

By: _____
Attorney-In-Fact

(Address)

NOTE: Date of BOND must not be prior to date of CONTRACT.
If CONTRACT is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

NOTICE OF AWARD - CONTRACT "A"

TO: _____

PROJECT DESCRIPTION: 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVE-
MENTS (BOOSTER PUMP STATION AND MAINS) -
CONTRACT "A"

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated SEPTEMBER 17, 1998, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ _____.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and Certificates of Insurance within 10 calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within 10 days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 19 ____.

HICKORY WATER DISTRICT
OWNER

BY: _____

TITLE: ROBERT H. SULLIVAN, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by _____

_____ this the _____ day of _____, 19 ____.

BY: _____

TITLE: _____

NOTICE TO PROCEED - CONTRACT "A"

TO: _____

DATE: _____

PROJECT: 1998 INDUSTRIAL PARK WATER
SYSTEM IMPROVEMENTS
(BOOSTER PUMP STATION AND
MAINS) - CONTRACT "A"

You are hereby notified to commence WORK in accordance with the Agreement dated _____,
19 ____, on or before _____, 19 ____, and you are to complete the WORK within 180
consecutive calendar days thereafter. The date of completion of all WORK is therefore _____,
19 ____.

HICKORY WATER DISTRICT
OWNER

BY: _____

TITLE: ROBERT H. SULLIVAN, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by _____

this the _____ day of _____, 19 _____.

BY: _____

TITLE: _____

CHANGE ORDER - CONTRACT "A"

ORDER NO.: _____

DATE: _____

AGREEMENT DATE: _____

NAME OF PROJECT: 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS
(BOOSTER PUMP STATION AND MAINS) - CONTRACT "A"

OWNER: HICKORY WATER DISTRICT

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ _____.

The CONTRACT PRICE due to this CHANGE ORDER will be _____ by:
(Increased / Decreased)
\$ _____.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ _____.

Change to CONTRACT TIME:

The CONTRACT TIME will be _____ by _____ calendar days.
(Increased / Decreased)

The date for completion of all work will be _____.
(Date)

Requested by: _____ OWNER

Recommended by: _____ ENGINEER

Accepted by: _____ CONTRACTOR

GENERAL CONDITIONS

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Definitions 2. Additional Instructions and Detail Drawings 3. Schedules, Reports, and Records 4. Drawings and Specifications 5. Shop Drawings 6. Materials, Services, and Facilities 7. Inspection and Testing 8. Substitutions 9. Patents 10. Surveys, Permits, Regulations 11. Protection of Work, Property, Persons 12. Supervision by Contractor 13. Changes in the Work 14. Changes in Contract Price 15. Time for Completion and Liquidated Damages 16. Correction of Work | <ol style="list-style-type: none"> 17. Subsurface Conditions 18. Suspension of Work, Termination, and Delay 19. Payments to Contractor 20. Acceptance of Final Payment as Release 21. Insurance 22. Contract Security 23. Assignments 24. Indemnification 25. Separate Contracts 26. Subcontracting 27. Engineer's Authority 28. Land and Rights-of-Way 29. Guaranty 30. Arbitration 31. Taxes |
|--|---|

1. DEFINITIONS.

- 1.1. Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated and shall be applicable to both the singular and plural thereof:
- 1.2. ADDENDA - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications, or corrections.
- 1.3. BID - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4. BIDDER - Any person, firm, or corporation submitting a BID for the WORK.
- 1.5. BONDS - Bid, Performance, and Payment Bonds and other instruments of surety, furnished by the CONTRACTOR and the CONTRACTOR'S surety in accordance with the CONTRACT DOCUMENTS.
- 1.6. CHANGE ORDER - A written order to the CONTRACTOR authorizing an addition, deletion, or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.7. CONTRACT DOCUMENTS - The CONTRACT, including Advertisement For BIDS, Information for BIDDERS, BID, BID BOND, AGREEMENT, PAYMENT BOND, PERFORMANCE BOND, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, and ADDENDA.
- 1.8. CONTRACT PRICE - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.9. CONTRACT TIME - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

- 1.10. DEVELOPER - A corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.11. CONTRACTOR - The person, firm, or corporation with whom the OWNER has executed the Agreement.
- 1.12. DRAWINGS - The parts of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.13. ENGINEER - The person, firm, or corporation named as such in the CONTRACT DOCUMENTS.
- 1.14. FIELD ORDER - A written order affecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.15. NOTICE OF AWARD - The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
- 1.16. NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him/her to proceed with the WORK and establishing the date for commencement of the WORK.
- 1.17. OWNER - A public or quasi-public body or authority, corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.18. PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.19. RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.20. SHOP DRAWINGS - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.21. SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- 1.22. SUBCONTRACTOR - An individual, firm, or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.23. SUBSTANTIAL COMPLETION - That date certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.24. SUPPLEMENTAL GENERAL CONDITIONS - Modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.
- 1.25. SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.

- 1.26. WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.
 - 1.27. WRITTEN NOTICE - Any notice to any party of the AGREEMENT relative to any part of this AGREEMENT in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at their last given address, or delivered in person to said party or their authorized representative on the WORK.
- 2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS.**
- 2.1. The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
 - 2.2. The additional drawings and instructions thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.
- 3. SCHEDULES, REPORTS AND RECORDS.**
- 3.1. The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.

With each succeeding progress payment request, the progress schedule shall be reviewed and revised (if necessary) and shall show the per cent complete of each major feature of the work.
 - 3.2. Prior to the first partial payment estimate, the CONTRACTOR shall submit construction progress schedules showing the order in which the CONTRACTOR proposes to carry on the WORK, including dates at which the various parts of the WORK will be started, estimated date of completion of each part and, as applicable:
 - 3.2.1. The dates at which special detail drawings will be required; and
 - 3.2.2. Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.
 - 3.3. The CONTRACTOR shall also submit a schedule of payments that the CONTRACTOR anticipates will be earned during the course of the WORK.
- 4. DRAWINGS AND SPECIFICATIONS.**
- 4.1. The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER .
 - 4.2. In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over general DRAWINGS.
 - 4.3. Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

5. SHOP DRAWINGS.

- 5.1. The CONTRACTOR shall provide SHOP DRAWINGS of all mechanical and electrical equipment and all appearance items. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of any SHOP DRAWING which substantially deviates from the requirement of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.
- 5.2. When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3. Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6. MATERIALS, SERVICES AND FACILITIES.

- 6.1. It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 6.2. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 6.4. Materials, supplies, and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 6.5. Materials, supplies, or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING.

- 7.1. All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 7.2. The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3. The CONTRACTOR shall provide at the CONTRACTOR'S expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 7.4. If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely

notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.

- 7.5. Inspections, tests, or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from the obligation to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6. The ENGINEER and the ENGINEER'S representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records or personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection or testing thereof.
- 7.7. If any WORK is covered contrary to the written instructions of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER'S observation and replaced at the CONTRACTOR'S expense.
- 7.8. If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expense of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, if, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS.

- 8.1. Whenever a material, article, or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue numbers, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS.

- 9.1. The CONTRACTOR shall pay all applicable royalties and license fees, and shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or product of a particular manufacturer or manufacturers is specified; however, if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, the CONTRACTOR shall be responsible for such loss unless the CONTRACTOR promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS.

- 10.1. The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pipe locations and other working points, lines, elevations and cut sheets.
- 10.2. The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, shall be charged with the resulting expense and shall be responsible for any mistake that may be caused by their unnecessary loss or disturbance.
- 10.3. Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, the CONTRACTOR shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY, AND PERSONS.

- 11.1. The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR will take all necessary precautions for the safety of, will provide the necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 11.2. The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. The CONTRACTOR will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. The CONTRACTOR will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone directly or indirectly employed by any of them or anyone of whose acts any of them may be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER, of the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3. In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instructions or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. The CONTRACTOR will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

12. SUPERVISION BY CONTRACTOR.

- 12.1. The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN THE WORK.

- 13.1. The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the AGREEMENT. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.
- 13.2. The ENGINEER also may, at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles the CONTRACTOR to a change in CONTRACT PRICE or TIME, or both, in which event the CONTRACTOR shall give the ENGINEER WRITTEN NOTICE thereof within 7 days after the receipt of the ordered change. Thereafter, the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within 30 days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

14. CHANGES IN CONTRACT PRICE.

- 14.1. The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:
- a. Unit prices previously approved.
 - b. An agreed lump sum.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES.

- 15.1. The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.
- 15.2. The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.
- 15.3. If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4. The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.

15.4.1. To any preference, priority or allocation order duly issued by the OWNER .

15.4.2. To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and

15.4.3. To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. **CORRECTION OF WORK.**

16.1. The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2. All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within 10 days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. **SUBSURFACE CONDITIONS.**

17.1. The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

17.1.1. Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

17.1.2. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

17.2. The OWNER shall promptly investigate the conditions, and if it is found that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless the required WRITTEN NOTICE has been given; provided that the OWNER may, if the OWNER determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

18. **SUSPENSION OF WORK, TERMINATION, AND DELAY.**

18.1. The OWNER may suspend the WORK or any portion thereof for a period of not more than 90 days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be

allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

- 18.2. If the CONTRACTOR is adjudged bankrupt or insolvent, or makes a general assignment for the benefit of its creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of its property, or if CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or disregards the authority of the ENGINEER or otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and its surety a minimum of 10 days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method the OWNER may deem expedient. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 18.3. Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.4. After 10 days from delivery of WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.
- 18.5. If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than 90 days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within 30 days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within 30 days of its approval and presentation, then the CONTRACTOR may, after 10 days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon 10 days written notice to the OWNER and the ENGINEER stop the WORK until paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.
- 18.6. If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

19. PAYMENT TO CONTRACTOR.

- 19.1. At least 10 days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER as will establish the OWNER'S title to the material and equipment and protect the OWNER'S interest therein, including applicable insurance. The ENGINEER will, within 10 days after receipt of each partial payment estimate, either indicate in writing approval of payment, and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing the reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within 10 days of presentation of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate less the retainage. The retainage shall be an amount equal to 10 percent of said estimate until 50 percent of the work has been completed. At 50 percent completion, further partial payments shall be made in full to the CONTRACTOR and no additional amounts may be retained unless the ENGINEER certifies that the job is not proceeding satisfactorily, but amounts previously retained shall not be paid to the CONTRACTOR. At 50 percent completion or any time thereafter when the progress of the WORK is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10 percent of the value of the work completed. Upon substantial completion of the work, any amount retained may be paid to the CONTRACTOR. When the WORK has been substantially completed except for WORK which cannot be completed because of weather conditions, lack of materials or other reasons which, in the judgment of the OWNER, are valid reasons for noncompletion, the OWNER may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the WORK still to be completed.
- 19.2. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 19.3. Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.4. The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- 19.5. Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within 30 days of completion and acceptance of the WORK.
- 19.6. The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demand of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so, the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from

the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, the CONTRACTOR'S Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

- 19.7. If the OWNER fails to make payment 30 days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE.

- 20.1. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the CONTRACT DOCUMENTS or the PERFORMANCE and PAYMENT BONDS.

21. INSURANCE.

- 21.1. The CONTRACTOR shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of, or result from the CONTRACTOR'S execution of the WORK, whether such execution be by the CONTRACTOR, any SUBCONTRACTOR, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
- 21.1.1. Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
 - 21.1.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees;
 - 21.1.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than employees;
 - 21.1.4. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and
 - 21.1.5. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- 21.2. Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least 15 days prior WRITTEN NOTICE has been given to the OWNER.
- 21.3. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:

21.3.1. CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting the CONTRACTOR from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by the CONTRACTOR or by any SUBCONTRACTOR employed by the CONTRACTOR or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR employed by the CONTRACTOR. Insurance shall be written with a limit of liability of not less than \$500,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$200,000 aggregate for any such damage sustained by two or more persons in any one accident.

21.3.2. The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage Insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

21.4. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the WORK is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of the CONTRACTOR'S employees at the site of the PROJECT and in case any WORK is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide adequate and suitable insurance for the protection of its employees not otherwise protected.

21.5. The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the CONTRACT TIME and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, and the OWNER.

22. CONTRACT SECURITY.

22.1. The CONTRACTOR shall within 10 days after the receipt of the NOTICE OF AWARD furnish the OWNER with a PERFORMANCE BOND and a PAYMENT BOND in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies

accepted on Federal Bonds, CONTRACTOR shall within 10 days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premium on such BOND shall be paid by the CONTRACTOR. No further payment shall be deemed due nor shall be made until the new surety or sureties have furnished an acceptable BOND to the OWNER.

23. ASSIGNMENTS.

- 23.1. Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of any right, title or interest therein, or any obligations thereunder, without written consent of the other party.

24. INDEMNIFICATION.

- 24.1. The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.
- 24.2. In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.
- 24.3. The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, its agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

25. SEPARATE CONTRACTS.

- 25.1. The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate the WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.
- 25.2. The OWNER may perform additional WORK related to the PROJECT or the OWNER may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if the OWNER is performing the additional WORK) reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate the WORK with theirs.
- 25.3. If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others

involves it in additional expense or entitles it to an extension of the CONTRACT TIME, the CONTRACTOR may make a claim thereof as provided in Sections 14 and 15.

26. SUBCONTRACTING.

- 26.1. The CONTRACTOR may utilize the services of specialty SUBCONTRACTS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- 26.2. The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of 50 percent of the CONTRACT PRICE, without prior written approval of the OWNER.
- 26.3. The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of its SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as the CONTRACTOR is for the acts and omissions of persons directly employed by the CONTRACTOR.
- 26.4. The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 26.5. Nothing contained in this CONTRACT shall create any contractual relationship between any SUBCONTRACTOR and the OWNER.

27. ENGINEER'S AUTHORITY.

- 27.1. The ENGINEER shall act as the OWNER'S representative during the construction period, shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed, and shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 27.2. The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship, and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
- 27.3. The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
- 27.4. The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

28. LAND AND RIGHTS-OF-WAY.

- 28.1. Prior to issuance of the NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
- 28.2. The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
- 28.3. The CONTRACTOR shall provide at its own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

29. GUARANTEE.

- 29.1. The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of 1 year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of 1 year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The PERFORMANCE BOND shall remain in full force and effect through the guarantee period.

30. ARBITRATION BY MUTUAL AGREEMENT.

- 30.1. All claims, disputes, and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by making an acceptance of final payment as provided by Section 20, may be decided by arbitration if the parties mutually agree. Any agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.
- 30.2. Notice of the request for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and a copy shall be filed with the ENGINEER. Request for arbitration shall in no event be made on any claim, dispute, or other matter in question which would be barred by the applicable statute of limitations.
- 30.3. The CONTRACTOR will carry on the WORK and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

31. TAXES.

- 31.1. The CONTRACTOR will pay all sales, consumer, use, and other similar taxes required by the laws of the place where the WORK is performed.

SUPPLEMENTAL GENERAL CONDITIONS

- S1 Definitions
- S2 Federally Required Contract Provisions
- S3 Required Provisions Deemed Inserted
- S4 Inspection by EDA Representatives
- S5 Construction Schedule and Periodic Estimates
- S6 Contractor's Title to Material
- S7 Inspection and Testing of Materials
- S8 "Or Equal" Clause
- S9 Patents
- S10 Claims for Extra Cost
- S11 Contractor's and Subcontractor's Insurance
- S12 Contract Security
- S13 Safety and Health Regulations for Construction
- S14 Minimum Wages
- S15 Withholding of Payments
- S16 Payrolls and Basic Records
- S17 Apprentices and Trainees
- S18 Subcontracts
- S19 Termination and Debarment
- S20 Overtime Requirements
- S21 Equal Employment Opportunity
- S22 Other Prohibited Interests
- S23 Employment of Local Labor
- S24 Historical and Archeological Data Preservation Act of 1974
- S25 Clean Air and Federal Water Pollution Control Act
- S26 Use of Lead-Based Paints on Residential Structures
- S27 Signs

SUPPLEMENTAL GENERAL CONDITIONS

S-1 DEFINITIONS

The following terms as used in these Supplemental General Conditions are respectively defined as follows:

- a. "Contractor": A person, firm, or corporation with whom this Contract is made by the Owner.
- b. "Subcontractor": A person, firm, or corporation supplying labor and materials or only labor, for work at the site of the project, for and under separate contract or agreement with the Contractor.
- c. "Work on (at) the project": Work to be performed at the location of the project, including the transportation of materials and supplies to or from the location of the project by employees of the Contractor and any subcontractor.
- d. "Apprentice": (1) A person employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau; or (2) a person in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship council (where appropriate) to be eligible for probationary employment as an apprentice.
- e. "Trainee": A person receiving on-the-job training in a construction occupation under a program which is approved (but not necessarily sponsored) by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, and which is reviewed from time to time by the Manpower Administration to insure that the training meets adequate standards.

S-2 FEDERALLY REQUIRED CONTRACT PROVISIONS

- a. Administrative, contractual, or legal remedies in instances where

contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate (Contracts more than the simplified acquisition threshold).

- b. Termination for cause and for convenience by the grantee including the manner by which it will be effected and the basis for settlement (All contracts in excess of \$10,000).
- c. Compliance with Executive Order 11246 of September 24, 1965 entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967 and as supplemented in Department of Labor regulations (41 CFR Chapter 60) (All construction contracts awarded in excess of \$10,000 by grantees and their contractors or subgrantees).
- d. Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3) (All contracts and subgrants for construction or repair).
- e. Compliance with the Davis-Bacon Act (40 U.S.C. 276a to a-7) as supplemented by Department of Labor regulations (29 CFR Part 5) (Construction contracts in excess of \$ 2,000 awarded by grantees and subgrantees).
- f. Compliance with sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5). (Construction contracts awarded by grantees and subgrantees in excess of \$ 2,000, and in excess of \$ 2,500 for other contracts which involve the employment of mechanics or laborers)
- g. EDA requirements and regulations pertaining to reporting.
- h. EDA requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.
- I. EDA requirements and regulations pertaining to copyrights and rights in data.
- j. Access by the grantee, EDA, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.

- k. Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.
- l. Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clear Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15) (Contracts, subcontracts, and subgrants of amounts in excess of \$ 100,000).
- m. Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub L. 94-163, 89 Stat. 871)

S-3 REQUIRED PROVISIONS DEEMED INSERTED

- a. Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion of correction.

S-4 INSPECTION BY ECONOMIC DEVELOPMENT REPRESENTATIVES

The authorized representatives and agents of the Economic Development Administration shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials and other relevant data and records.

S-5 CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor also shall furnish the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making

partial payments thereon. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

S-6 CONTRACTOR'S TITLE TO MATERIAL

No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he/she has good title to all materials and supplies used by him/her in the work, free from all liens, claims or encumbrances.

S-7 INSPECTION AND TESTING OF MATERIALS

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. The Owner shall pay for all laboratory inspection service directly, and not as part of the contract.

Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for intended users.

S-8 "OR EQUAL" CLAUSE

Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, tradenames, catalogue numbers, etc., it is intended merely to establish a standard; and, any material, article or equipment of other manufacturers and vendors which will perform adequately the duties, imposed by the general design will be considered equally acceptable provided the material, article or equipment so proposed is, in the opinion of the Architect/Engineer, of equal substance and function. It shall not be purchased or installed by the Contractor without the Architect/Engineer's written approval.

S-9 PATENTS

The Contractor shall hold and save the owner and its officers, agents, servants and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the contract documents.

License or Royalty Fee: License and/or royalty fees for the use of a process which is authorized by the Owner of the project must be reasonable, and paid to the holder of the patent, or his authorized licensee, directly by the Owner and not by or through the Contractor. If the Contractor uses any design, device or materials covered by letters, patent or copyright, he/she shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, device or material. It is mutually agreed and understood that, without exception, the contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his/her Sureties shall indemnify and hold harmless the Owner of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract, and shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

S-10 CLAIMS FOR EXTRA COSTS

No claims for extra work or cost shall be allowed unless the same was done in pursuance of a written order from the Architect/Engineer approved by the Owner.

S-11 CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

The Contractor shall not commence work under this contract until he/she has obtained all the insurance required by the Owner, nor shall the Contractor allow any subcontractor to commence work on his/her subcontract until the insurance required of the subcontractor has been so obtained and approved.

a. Types of insurance normally required are:

1. Workmen's Compensation
 2. Contractor's Public Liability and Property Damage
 3. Contractor's Vehicle Liability
 4. Subcontractors Public Liability, Property Damage and Vehicle Liability
 5. Builder's Risk (Fire and Extended Coverage)
- b. Scope of Insurance and Special Hazards. The insurance described above shall provide adequate protection for the Contractor and his/her claims which may arise from operations under this contract, whether such operations be by the insured or by any one directly or indirectly employed by him/her and also against any of the special hazards which may be encountered in the performance of this contract.
- c. Proof of Carriage of Insurance The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies.

S-12 CONTRACT SECURITY BONDS

If this contract is for an amount in excess of \$100,000 the Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the contract price as security for the faithful performance of this contract and also a payment bond in an amount equal to one hundred percent (100%) of the contract price or in a penal sum not less than that prescribed by State, Territorial or local law, as security for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law. Before final acceptance each bond must be approved by the Economic Development Administration. If this contract is for an amount less than \$100,000 the Owner will specify the amount of the payment and performance bonds.

S-13 SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

In order to protect the lives and health of his/her employees under the contract, the Contractor shall comply with all pertinent provisions of the Contract Work Hours and Safety Standards Act, as amended, commonly known as the Construction Safety Act as pertains to health and safety standards; and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work arising out of and in the course of employment on work under the contract. Section 107 of

the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction, safety and health standards promulgated by the Secretary of Labor.

The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his/her plan, equipment, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operation.

S-14 MINIMUM WAGES

All mechanics and laborers employed or working on the site of the work, or under the United States Housing Act of 1937, or under the Housing Act of 1949 in the construction or development of the project will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amounts due at time of payment computed at wage rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and subcontractor and such laborers and mechanics; and the wage determination decision shall be posted by the Contractor at the site of the work in a prominent place where it can be easily seen by the workers. For the purpose of this clause, contributions made or costs reasonably anticipated under Section 1 (b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5 (a) (1)(iv).

Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

The Owner shall require that any class of laborers and mechanics, including apprentices and trainees, which is not listed in the wage determination and which is to be employed under the contract, shall be classified or reclassified conformable to the wage determination and a report of the action taken shall be sent by the Federal agency to the Secretary of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular

class of laborers and mechanics, including apprentices and trainees, to be used, the questions accompanied by the recommendation of the contracting officer shall be referred to the Secretary of Labor for final determination.

Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the Contractor is obligated to pay a cash equivalent of such a fringe benefit, the Owner shall require an hourly cash equivalent to be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question, accompanied by the recommendation of the Owner, shall be referred to the Secretary of Labor for determination.

If the Contractor does not make payments to a trustee or other third person, he/she may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor which is a part of this contract; provided, however, the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

S-15 WITHHOLDING OF PAYMENTS

The Economic Development Administration may withhold or cause to be withheld from the Contractor as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices and trainees, employed by the Contractor or any subcontractor on the work, the full amount of wages required by the contract in accordance with the Davis-Bacon Act. In the event of failure to pay any laborer or mechanic, including any apprentice or trainee employed or working on the project site or under the United States Housing Act of 1937 or under the Housing Act of 1949, in the construction or development of the project, all or part of the wages required by the contract, the Economic Development Administration may, after written notice to the Contractor, sponsor, applicant, or Owner, take action as may be necessary to cause the suspension of any further payment, advance, or guaranty of funds until such violations have ceased.

S-16 PAYROLLS AND BASIC RECORDS

Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the EDA project site, or under the United States Housing Act of 1937 or under the Housing Act of 1949, in the construction or development of the project. Such records shall contain the name and address of each employee, his/her correct classification, rate of pay (including contributions or costs anticipated of the types described in Section 9 (b) (2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a) (1) (iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan program described in Section 1 (b) (2) (B) of the Davis-Bacon Act the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, plus records which show the costs anticipated or the actual cost incurred in providing such benefits.

The Contractor shall submit weekly a copy of all payrolls to the Owner on DOL Form WH-347 or equivalent. The copy shall be signed on the reverse side by the employer or his/her agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor and that the classifications set forth for each laborer or mechanic conform with the work he/she performed. This submission is required under this contract and the Copeland regulations of the Secretary of Labor (29 CFR Part 3) and the filing with the initial payroll or any subsequent payroll of a copy of any findings by the Secretary of Labor under 20 CFR 5.5 (a) (1) (iv) shall satisfy this requirement. The Prime Contractor shall be responsible for the submission of copies of payrolls of all subcontractors. The Contractor shall make the records required under the labor standards clause of the contract available for inspection by authorized representatives of the Economic Development Administration and the Department of Labor, and shall permit such representatives to interview employees during working hours on the job.

S-17 APPRENTICES AND TRAINEES

Apprentices will be permitted to work as such only when they are registered, individually, under a bona fide apprenticeship program registered with a State apprenticeship agency which is recognized by the Bureau of Apprenticeship and Training, U. S. Department of Labor; or, if no such recognized agency exists in

a State, under a program registered with the Bureau of Apprenticeship and Training, U. S. Department of Labor. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the Contractor as to his/her entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not a trainee as defined in Section S-1e herein and is not registered as above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or subcontractor shall be required to furnish to the Owner written evidence of the registration of his/her program and apprentices as well as of the appropriate ratios and wage rates for the area of construction prior to using any apprentices on the contract work.

Trainees will be permitted to work as such when they are bona fide trainees employed pursuant to a program approved by the U. S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, and when the subparagraph below is applicable, in accordance with the provisions of Part 5, Subpart A, Title 29, Code of Federal Regulations.

On contracts in excess of \$10,000, the employment of all laborers and mechanics, including apprentices and trainees, as defined in Section 29 CFR 5.5 shall also be subject to the provisions of Part 5, Subpart A, Title 29, Code of Federal Regulations. Apprentices and trainees shall be hired in accordance with the requirements of Part 5, Subpart A. The provisions of Sections S-14, S-15, and S-17 shall be applicable to every invitation for bids, and to every negotiation, request for proposals, or request for quotations, for an assisted construction contract, and to every such contract entered into on the basis of such invitation or negotiation. Part 5, Subpart A, Title 29, Code of Federal Regulations shall constitute the conditions of each assisted contract in excess of \$10,000, and each Owner concerned shall include these conditions or provide for their inclusion, in each such contract. These "Supplemental General Conditions" shall also be included in each such contract.

S-18 SUBCONTRACTS

The Contractor shall insert in any subcontracts these same "Supplemental General Conditions."

S-19 TERMINATION AND DEBARMENT

A breach of any one of the Sections S-15 through S-18 may be considered by the Owner and by the Economic Development Administration as grounds for

termination of the contract and for debarment as provided in 29 CFR 5.6.

S-20 OVERTIME REQUIREMENTS

No Contractor nor any subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he/she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his/her basic rate of pay for all hours in excess of forty hours in such workweek.

In the event of any violation of the clause set forth in the subsection above, the Contractor and any subcontractor responsible therefor, shall be liable to any affected employee for his/her unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or territory, to such District of Columbia or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the clause set forth above in the sum of \$10.00 for each calendar day on which such employee was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth above.

The Economic Development Administration may withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth above.

The Contractor shall insert in all subcontracts the clause set forth above in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts that may, in turn, be made.

S-21 EQUAL EMPLOYMENT OPPORTUNITY

No person in the United States shall, on the grounds of race, color, national origin, age, physical handicap, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance; Reference Title VI of the Civil Rights Act

of 1964 (42 USC 2000d) and Section 112 of Public Law 92-65, Age Discrimination Act of 1975 (42 USC 6102) and Section 504 of the Rehabilitation Act of 1973 (26 USC 794).

Form ED-503 The Owner and all Contractors, subcontractors, suppliers, leasees and other parties directly participating in the Recipient's project agree that during and in connection with the associated agreement relating to the Federally assisted program, (i) they will comply, to the extent applicable, as Contractors, subcontractors, lessees, suppliers, or in any other capacity, with the applicable provisions of 13 CFR 311 and the Regulations of the United States Department of Commerce (Part 8 of Subtitle A of Title 15 of the Code of Federal Regulations) issued pursuant to Title VI of the Civil Rights Act of 1964 (P. L. 88-352), and will not thereby discriminate against any person on the grounds of race, sex, color, age, or national origin in their employment practices, in any of their own contractual agreements, in all services or accommodations which they offer to the public, and in any of their other business operations, (ii) they will provide information required by or pursuant to said Regulations to ascertain compliance with the Regulations and these assurances, and (iii) their non-compliance with the nondiscrimination requirements of said Regulations and these assurances shall constitute a breach of their contractual arrangements with the Owner whereby said agreements may be canceled, terminated or suspended in whole or in part or may be subject to enforcement otherwise by appropriate legal proceedings.

Executive Order 11246, 3 CFR 339 (1965) (Equal Opportunity Clause). During the performance of this contract, the Contractor agrees as follows:

- a. The Contractor shall not discriminate against any employee or applicant for employment because of age, race, color, religion, sex, handicap, or national origin. The Contractor shall take affirmative action to ensure the applicants are employed, and that employees are treated during employment, without regard to their age, race, color, religion, sex, handicap or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- b. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided by the Grantee setting forth the provisions of this nondiscrimination clause.
- c. The Contractor shall, in all solicitations or advertisements for employees

placed by or on behalf of the Contractor, state that all qualified applicants shall receive consideration for employment without regard to race, color, religion, sex, or national origin.

- d. A notice to be provided by the Grantee shall be sent to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract of understanding, advertising the labor union or workers' representative of the Contractor's commitment under Section 202 of Executive Order No. 11246 of September 24, 1965, and copies of the notice shall be posted in conspicuous places available to employees and applicants for employment.
- e. The Contractor shall comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of rules, regulations, and relevant orders of the Secretary of Labor.
- f. The Contractor shall furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the Economic Development Administration and the Secretary of Labor for purpose of investigation to ascertain compliance with such rules, regulations, and orders. Each Contractor and subcontractor of federally assisted construction work is required to file an Equal Employment Opportunity Employer Information Report (EEO-1) on Standard Form 100, annually on March 31. Forms and instructions are available at the EDA Regional Offices.
- g. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed (and remedies involved) as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- h. The Contractor shall include the provisions of paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 203 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The

Contractor shall take such action with respect to any subcontractor or purchase order as the Economic Development Administration may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the Grantee/Borrower, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

i. Exemptions to Above Equal Opportunity Clause (41 CFR Chap. 60):

- (1) Contracts and subcontracts not exceeding \$10,000 (other than Government bills of lading) are exempt. The amount of the contract, rather than the amount of the Federal financial assistance, shall govern in determining the applicability of this exemption.
- (2) Except in the case of subcontractors for the performance of construction work at the site of construction, the clause shall not be required to be inserted in subcontracts below the second tier.
- (3) Contracts and subcontracts not exceeding \$10,000 for standard commercial supplies or raw materials are exempt.

STANDARD FEDERAL EQUAL EMPLOYMENT
OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246 et seq)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan

approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to make good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in Paragraphs 7a through p of these specifications. The goals set for the Contractor in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation,

and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all superintendents and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority and female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Regional Director when the union or unions, with which the Contractor has a collective bargaining agreement, have not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under Paragraph 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all

management personnel and with all minority and female employees at least once a year, and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, Supervisors, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, and providing written notification to, and discussing the Contractor's EEO policy with, other Contractors and subcontractors with whom the Contractor anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after-school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 14 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually

monitoring all personnel and employment-related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (Paragraph 7a through p). The efforts of a contractor association, joint contractor-union, contractor community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Paragraph 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof, as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application or requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).
16. The goals for minority and female participation in each trade will be furnished by

the Economic Development Administration of the U. S. Department of
Commerce.

S-22 OTHER PROHIBITED INTERESTS

No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer, or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

S-23 EMPLOYMENT OF LOCAL LABOR

- a. The maximum feasible employment of local labor shall be made in the construction of public works and development facility projects receiving direct Federal grants. Accordingly, every Contractor and subcontractor undertaking to do work on any such project which is or reasonably may be done as on-site work, shall employ, in carrying out such contract work, qualified persons who regularly reside in the designated area where such project is to be located, or in the case of Economic Development Centers, qualified persons who regularly reside in the center or in the adjacent or nearby redevelopment areas within the Economic Development District, except:
 - (1) To the extent that qualified persons regularly residing in the designated area or Economic Development District are not available.
 - (2) For the reasonable needs of any such Contractor or subcontractor, to employ supervisory or specially experienced individuals necessary to assure an efficient execution of the Contract.
 - (3) For the obligation of any such Contractor or subcontractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that in no event shall the number of non-resident persons employed under this subparagraph exceed twenty percent of the total number of employees employed by such Contractor and his/her subcontractors on such project.
- b. Every such Contractor and subcontractor shall furnish the United States

Employment Service Office in the area in which a public works or development facility project is located with a list of all positions for which it may from time to time require laborers, mechanics, and other employees, the estimated numbers of employees required in each classification, and the estimated dates on which such employees will be required.

- c. The Contractor shall give full consideration to all qualified job applicants referred by the local employment service, but it is not required to employ any job applicants referred whom the Contractor does not consider qualified to perform the classification of work required.
- d. The payrolls maintained by the Contractor shall contain the following information: full name, address, and social security number and a notation indicating whether the employee does, or does not, normally reside in the area in which the project is located, or in the case of an Economic Development Center, in such center or in an adjacent or nearby redevelopment area within the Economic Development District, as well as an indication of the ethnic background of each worker.
- e. The Contractor shall include the provisions of this condition in every subcontract for work which is, or reasonably may be, done as on-site work.

S-24 HISTORICAL AND ARCHAEOLOGICAL DATA PRESERVATION ACT REQUIREMENTS

The Contractor agrees to facilitate the preservation and enhancement of structures and objects of historical, architectural or archaeological significance and when such items are found and/or unearthed during the course of project construction, to consult with the State Historic Preservation Officer for recovery of the items. Reference: National Historic Preservation Act of 1966 (80 Stat 915, 16 USC 470) and Executive Order No. 11593 of May 31, 1971.

S-25 CLEAN AIR ACT OF 1970, ET SEQ. AND FEDERAL WATER POLLUTION CONTROL ACT AS AMENDED BY THE CLEAN WATER ACT OF 1977

The Contractor agrees to comply with Federal clean air and water standards during the performance of this contract and specifically agrees to the following:

- a. The term "facility" means any building, plant, installation, structure, mine, vessel or other floating craft, location or site of operations; owned, leased, or supervised; by the Contractor and the subcontractors; for the construction,

supply and service contracts entered into by the Contractor;

- b. Any facility to be utilized in the accomplishment of this contract is not listed on the Environmental Protection Agency's List of Violating Facilities pursuant to 40 CFR, Part 15.20;
- c. In the event a facility utilized in the accomplishment of this contract becomes listed on the EPA list, this contract may be cancelled, terminated, or suspended in whole or in part;
- d. It will comply with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Water Pollution Control Act relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308, respectively, and all regulations and guidelines issued thereunder;
- e. It will promptly notify the Government of the receipt of any notice from the Director, Office of Federal Activities, Environmental Protection Agency, indicating that any facility utilized or to be utilized in the accomplishment of this contract is under consideration for listing on the EPA List of Violating Facilities;
- f. It will include the provisions of Paragraphs a. through g. in every subcontract or purchase order entered into for the purpose of accomplishing this contract, unless otherwise exempted pursuant to the EPA regulations implementing the Air or Water Acts above (40 CFR, Part 15.5), so that such provisions will be binding on each subcontractor or vendor;
- g. In the event that the Contractor or the subcontractor for the construction, supply and service contracts entered into for the purpose of accomplishing this contract were exempted from complying with the above requirements under the provisions of 40 CFR, Part 15.5 (a), the exemption shall be nullified should the facility give rise to a criminal conviction (see 40 CFR 15.20) during the accomplishment of this contract. Furthermore, with the nullification of the exemption, the above requirements shall be effective. The Contractor shall notify the Government, as soon as the Contractors' or the subcontractors' facility is listed for having given rise to a criminal conviction noted in 40 CFR, Part 15.20.

S-26 USE OF LEAD-BASED PAINTS ON RESIDENTIAL STRUCTURES

If the work under this contract involves construction or rehabilitation of residential structures, the Contractor shall comply with the Lead-based Paint Poisoning Prevention Act (see 42 U.S.C. 4831). The Contractor shall assure that paint used on the project on applicable surfaces does not contain lead in excess of the percentages set forth in Paragraphs (a) and (b) of this section. In determining compliance with these standards, the lead content of the paint shall be measured on the basis of the total nonvolatile content of the paint or on the basis of an equivalent measure of lead in the dried film of paint already applied.

- a. For paint manufactured after June 22, 1977, paint may not contain lead in excess of 6 one-hundredths of 1 percent (.00006) lead by weight.
- b. For paint manufactured on or before June 22, 1977, paint may not contain lead in excess of five-tenths of 1 percent lead by weight.

As a condition to receiving assistance under the Act, recipients shall assure that the restriction against the use of lead-based paint is included in all contracts and subcontracts involving the use of Federal funds.

Definitions

1. "Applicable surfaces" are those exterior surfaces which are readily accessible to children under 7 years of age.
2. "Residential structures" means houses, apartments, or other structures intended for human habitation, including institutional structures where persons reside, which are accessible to children under 7 years of age, such as day care centers, intermediate and extended care facilities, and certain community facilities.

S-27 EDA SIGNS

The Contractor shall supply, erect, and maintain a project sign according to the specifications set forth below:

EDA SITE SIGN SPECIFICATIONS

Size: Sign A: 4' x 8' x 1 7/8" Sign B: 4' x 8' x 3/4"

Materials: Face: Sign A - 1/4" tempered Masonite
Sign B - 3/4" or greater shop sanded (exterior) Plywood (one side only)

Framing: Sign A - 2" x 4" nominal on four sides and center cross bracing
Sign B - 2" x 4" center cross bracing only

Supports: 4" x 4" x 12' nominal post

Assembly: Sign A: 2" x 4" frame to fit 4' x 8' board with 2" x 4" cross braces
Sign B: To be mounted directly to the 4" x 4" post, with cross bracing

Mounting: Signs A and B are to be mounted to the 4" x 4" post with a 3/8" minimum bolt and nut, four on each side of the sign. Each bolt is to have two washers, one between the sign and the head of the bolt and the other between the post and the nut.

Erection: 4" x 4" posts are to be set three to four feet deep into concrete 12" in diameter.

Paint: Face: Three coats outdoor enamel (sprayed)
Rear: One coat outdoor enamel (sprayed)

Colors: Crimson Red, Stark White and Royal Blue. Specifically, white background; "JOBS" in red; "for your community" in blue; "EDA" logo and "PROVIDED BY EQUAL OPPORTUNITY EMPLOYERS, in partnership with the U. S. DEPARTMENT OF COMMERCE - Economic Development Administration" in black. "By working together we can provide economic opportunities for Americans" in black.

Lettering: Silk screen enamels. Lettering sizes and positioning will be as illustrated.

Project signs will not be erected on public highway rights-of-way.

Location and height of signs will be coordinated with the agency responsible for highway or street safety in the area, if any possibility exists for obstruction to traffic line of sight.

If, at the end of the project, the sign is reusable, it shall be disposed of as directed by the EDA Regional Office.

Whenever EDA Site Sign specifications conflict with State law or local ordinances, the EDA Regional Director may modify such conflicting specifications so as to comply with that State law or local ordinance.

SECTION VII: POST CONSTRUCTION GRANT REQUIREMENTS

1. Real Property	VII-1
A. Grantee ownership	VII-1
B. EDA's reversionary interest	VII-1
C. Successor grantees	VII-1
D. Applicability of requirements	VII-1
2. Definitions	VII-1
3. Use of Property	VII-2
A. Use only for authorized purposes	VII-2
B. Property no longer needed for grant purposes	VII-2
C. Property for lease or sale	VII-2
D. Property substitutions	VII-2
4. Unauthorized Use	VII-2
A. Disposal without EDA approval	VII-3
B. EDA actions for disposal without approval	VII-3
5. Federal Share	VII-3
A. Calculation of federal share	VII-3
B. Leasehold depreciation	VII-3
C. Transfer to another eligible grantee	VII-3
D. EDA interest after compensation	VII-3
6. Encumbrances	VII-3
A. Restrictions on encumbrances	VII-3
B. Compensation for encumbrances	VII-3
C. Waivers	VII-3
D. Water and sewer exceptions	VII-4
7. Civil Rights Restrictions	VII-4
8. Performance Reports	VII-4
9. Record Retention	VII-4
10. Program Income Earned After the Award Period	VII-4

SECTION VIII: EXHIBITS

SECTION VII

POST CONSTRUCTION GRANT REQUIREMENTS

1. Real Property

- A. All property that is acquired or improved with EDA grant assistance shall be held in trust by the grantee for the benefit of the project purposes under which the property was acquired or improved.
- B. During the estimated useful life of the project, EDA retains an undivided equitable reversionary interest in property acquired or improved with EDA grant assistance.
- C. EDA may approve the substitution of an eligible entity for a grantee. The original grantee remains responsible for the period it was the grantee, and the successor grantee holds the project property with the responsibilities of an original grantee under the award.
- D. The requirements contained in this part apply solely to grant and cooperative agreement award projects.

2. Definitions

A. As used in this Section VII:

- (1) Dispose includes sell, lease, abandon, or use for a purpose or purposes not authorized under the grant award or this part.
- (2) Estimated useful life means that period of years from the time of award, determined by EDA as the expected lifespan of the project.
- (3) Grantee includes any recipient, subrecipient, awardee, or subawardee of grant assistance under the Public Works and Economic Development Act of 1965, or under Title II, Chapter 3 of the Trade Act of 1974, Title I of the Public Works Employment Act of 1976, the Public Works Employment Act of 1977, or the Community Emergency Drought Relief Act of 1977, and any EDA-approved successor to such recipient, subrecipient, awardee or subawardee.
- (4) Owner includes fee owner, transferee, lessee, or optionee of real property upon which project facilities or improvements are or will be located, or real property improved under a project which has as its purpose that the property be sold.
- (5) Personal Property means all property other than real property.

- (6) Project means the activity and property acquired or improved for which a grant is awarded. When property is used in other programs "project" includes such programs.
- (7) Property includes all forms of property, real, personal (tangible and intangible), and mixed.
- (8) Real property means any land, improved land, structures, appurtenances thereto, or other improvements, excluding movable machinery and equipment. Improved land also includes land which is improved by the construction of such project facilities as roads, sewers, and water lines which are not situated directly on the land but which contribute to the value of such land as a specific part of the project purpose.

3. Use of property

- A. The grantee or owner shall use any property acquired or improved in whole or in part with grant assistance only for the authorized purpose of the project as long as it is needed during the estimated useful life of the project and such property shall not be leased, sold, disposed of or encumbered without the written authorization of EDA.
- B. In the event that EDA and the grantee determine that property acquired or improved in whole or in part with grant assistance is no longer needed for the original grant purpose, it may be used in other Federal grant programs, or programs that have purposes consistent with those authorized for support by EDA, if EDA approves such use.
- C. When the authorized purpose of the EDA grant is to develop real property to be leased or sold, as determined by EDA, such sale or lease is permitted provided the sale is consistent with the authorized purpose of the grant and with applicable EDA requirements concerning, but not limited to, nondiscrimination and nonrelocation.
- D. When acquiring replacement personal property of equal or greater value, the grantee may trade-in the property originally acquired or sell the original property and use the proceeds in the acquisition of the replacement property, provided that the replacement property shall be used for the project and be subject to the same requirements as the original property.

4. Unauthorized use

- A. Except as provided in 3B, 3C, or 3D above, whenever, during the expected useful life of the project, any property acquired or improved in whole or in part with grant assistance is disposed of without the approval of EDA, or no longer used for the authorized purpose of the project, the Federal Government shall be compensated by the grantee for the Federal share of the value of the property; provided that for equipment and supplies, the standards of the Uniform Administrative Requirements for Grants at 15 CFR part 24 and OMB Circular A-110 or any supplements or successors thereto, as applicable, shall apply.

- B. If property is disposed of without approval, EDA may assert its interest in the property to recover the Federal share of the value of the property for the Federal Government. EDA may pursue its rights under both paragraphs A and B of this section, except that the total amount to be recovered shall not exceed the Federal share, plus costs and interest.

5. Federal share.

- A. For purposes of this Section, the Federal share of the value of property is that percentage of the current fair market value of the property attributable to the EDA participation in the project (after deducting actual and reasonable selling and fix-up expenses, if any, incurred to put the property into condition for sale).
- B. Where the grantee's interest in property is a leasehold for a term of years less than the depreciable remaining life of the property, that factor shall be considered in determining the percentage of the Federal share.
- C. If property is transferred from the grantee to another eligible entity, as provided in paragraph 1C above, the Federal Government shall be compensated the Federal share of any money paid by or on behalf of the successor grantee to or for the benefit of the original grantee, provided that EDA may first permit the recovery by the original grantee of an amount not exceeding its investment in the project nor exceeding that percentage of the value of the property that is not attributable to the EDA participation in the project.
- D. When the Federal Government is compensated for the Federal share of the value of property acquired or improved in whole or in part with grant assistance, EDA has no further interest in the ownership, use or disposition of the property.

6. Encumbrances.

- A. Except as provided in paragraph 6C below, grantee-owned property acquired or improved in whole or in part with grant assistance may not be used to secure a mortgage or deed of trust or otherwise be used as collateral or encumbered except to secure a grant or loan made by a State or Federal agency or other public body participating in the same project.
- B. Encumbering such property other than as permitted in this section is an unauthorized use of the property requiring compensation to the Federal Government as provided in paragraphs 4 and 5 above.
- C. EDA may waive the provisions of paragraph 6A above for good cause when EDA determines all of the following:

- (1) All proceeds from the grant/loan to be secured by the encumbrance on the property shall be available only to the grantee, and all proceeds from such secured grant/loan shall be used only on the project for which the EDA grant was awarded or on related activities of which the project is an essential part;
- (2) The lender/grantor would not provide funds without the security of a lien on the project property; and
- (3) There is a reasonable expectation that the borrower/grantee will not default on its obligation.

D. EDA's Assistant Secretary or his designee may waive the provisions of paragraphs A and B above as to an encumbrance on property which is financed by an EDA public works grant when he/she determines that the encumbrance arises solely from the provisions of a pre-existing water or sewer facilities encumbrance which by its terms extends to additional property connected to such facilities. The Assistant Secretary's determination shall make reference to the specific provisions (for example, "water system and all accessions, additions or improvements thereto") which extend the terms of the pre-existing encumbrance to the property which is financed by the EDA public works grant.

7 Civil Rights Restriction

Recipient owners of industrial parks acquired, leased, or improved with EDA assistance may not sell, lease, or otherwise make any part of such premises available for occupancy by any person, firm, or entity unless the occupant first furnishes to the Recipient for transmittal to EDA, properly executed EDA forms evidencing the assurance of such occupant to comply with the Civil Rights Act of 1964.

8. Performance Reports

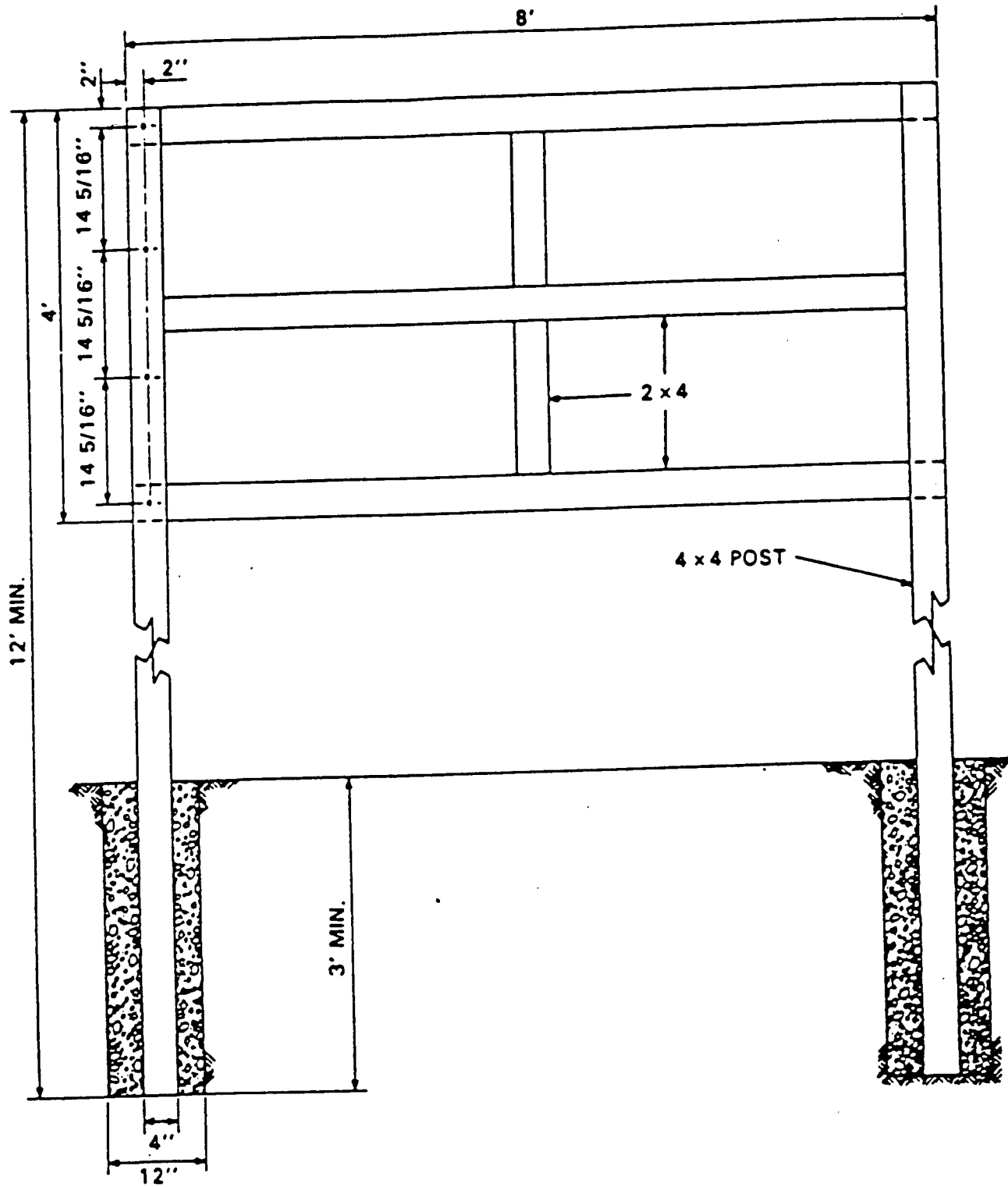
Recipients are responsible for submission to EDA of performance reports after receiving the final grant disbursement. A report will be due two years after, and four years after, the final grant disbursement. See Section I 2 F for further details.

9. Record Retention

Architect/engineering records and payroll records relating to the project must be retained as described in Section I 6 F, Section II 14 H and Section III 9 A.

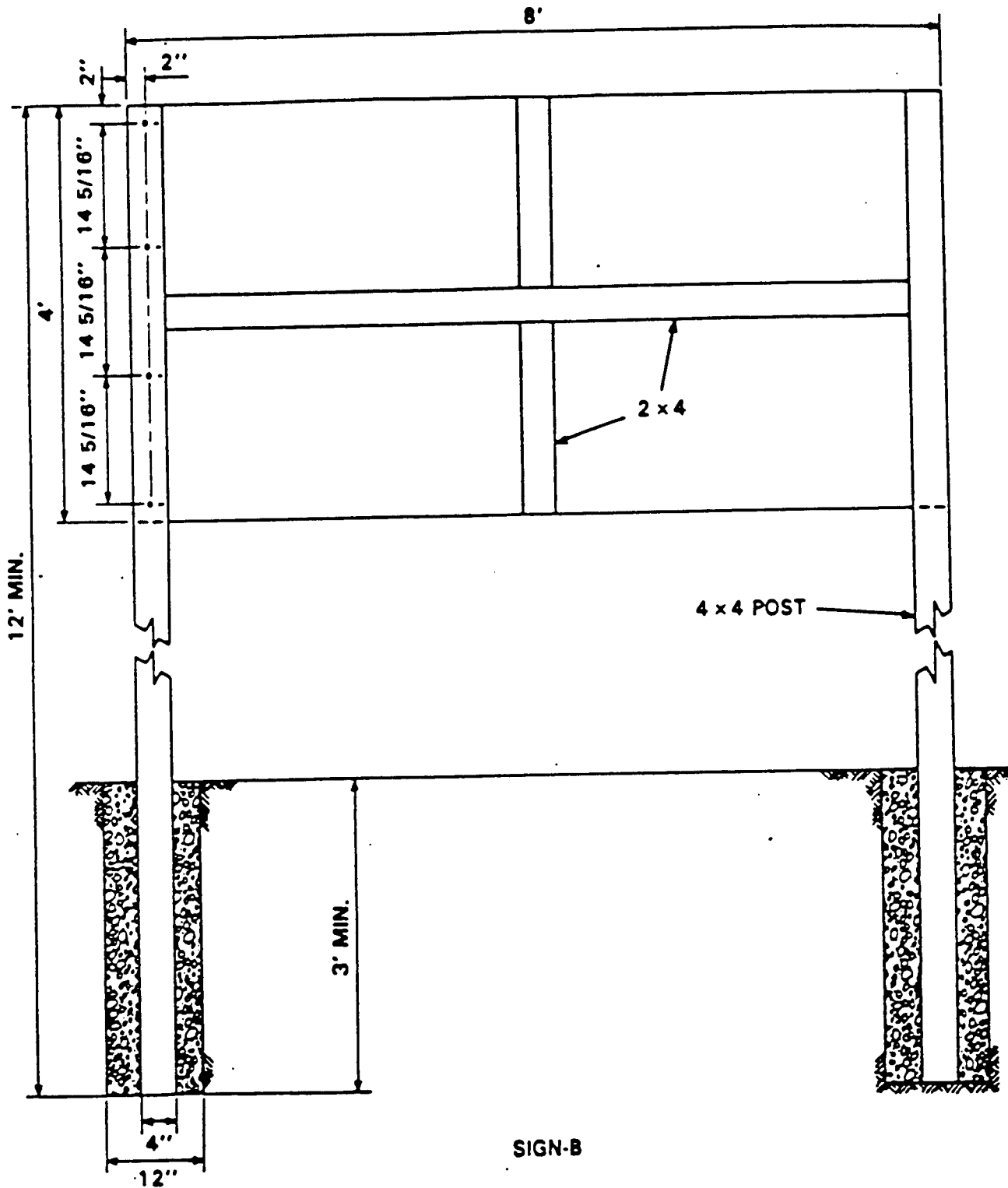
10. Program Income Earned After the Award Period

The uses for program income earned after the award period are described in Section IV 6 H.



ASSEMBLY OF MASONITE SIGN

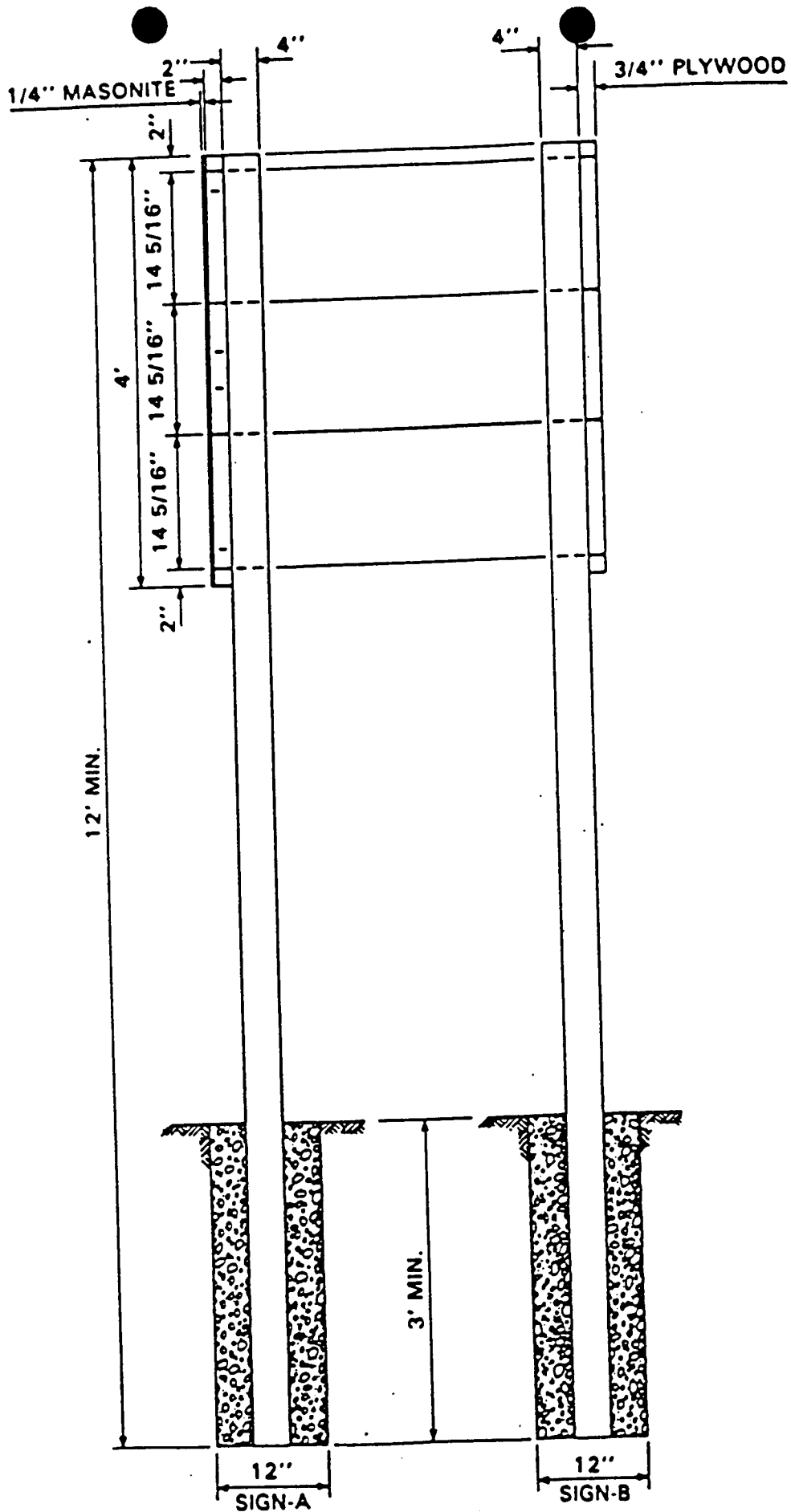
Exhibit B



SIGN-B

ASSEMBLY OF PLYWOOD SIGN

Exhibit B



JOB for your community

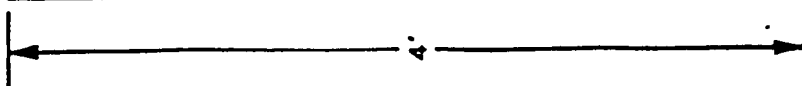
PROVIDED BY EQUAL OPPORTUNITY EMPLOYERS

In partnership with the



U.S. DEPARTMENT OF COMMERCE
Economic Development Administration

By working together we can provide economic opportunities for Americans



4'



8'

SCALE 1" = 1'

SPECIAL CONDITIONS

SC-1. GENERAL.

The following Special Conditions, particular to this project, are intended to complement or supplement the preceding General Conditions and shall be of like import.

SC-2. OWNERSHIP.

The completed facilities shall be owned, operated and maintained by HICKORY WATER DISTRICT, hereinafter referred to as the OWNER. All workmanship and materials shall be in conformance with the OWNER'S requirements. Acceptance of this project and final payment therefor shall be contingent thereon. The OWNER'S representatives shall have the right of access to the WORK in progress and the right to inspect said WORK.

SC-3. CONTRACT DOCUMENTS.

The following CONTRACT DOCUMENTS shall govern the materials furnished and the WORK to be performed on this contract:

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS ENTITLED "HICKORY WATER DISTRICT, GRAVES COUNTY, KENTUCKY, 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (BOOSTER PUMP STATION AND MAINS), CONTRACT "A", APRIL, 1998, (BID OCTOBER, 1998), EDA PROJECT NO. AKY 0382".

CONTRACT DRAWINGS BEING PLANS SHEETS COVER THROUGH 8 ENTITLED "HICKORY WATER DISTRICT, GRAVES COUNTY, KENTUCKY, 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS, CONTRACT "A", APRIL, 1998 (BID OCTOBER, 1998), EDA PROJECT NO. AKY 0382".

ADDENDA (IF APPLICABLE) TO BE ACKNOWLEDGED IN THE BID.

The CONTRACTOR shall be furnished, without cost, 3 COPIES of all CONTRACT DOCUMENTS with any addenda thereto. Additional copies, if required, may be obtained from the ENGINEER at cost.

SC-4. CLAIMS BY THE CONTRACTOR.

If the CONTRACTOR believes he is entitled to a change in the contract price or time, or both, he shall give the ENGINEER written notice and documentation of the basis for the claim within 7 days of the cause of such claim. The ENGINEER will, within 7 days of such claim notice, either prepare a change order for processing or notify the CONTRACTOR in writing of the reason for rejection. Also see GC-13 and GC-14.

If the ENGINEER'S decision is not acceptable, the CONTRACTOR, within 7 days after the ENGINEER'S response, shall notify the OWNER of his intention to pursue the claim.

As the OWNER has limited funds for this project and must operate within its established budget, no claim shall be recognized or admissible for legal process unless presented as described.

SC-5. PROJECT INSPECTION.

The OWNER may employ supervisors or inspectors to inspect materials furnished and the WORK performed to see that they are in accordance with the Plans, Specifications, and the OWNER'S standards.

Suggestions by or approval of any plan or method of WORK by the OWNER'S representative shall imply consent, but adoption of any such plan or method shall be at the CONTRACTOR'S own risk and responsibility.

PROJECT INSPECTION, TESTS OR APPROVALS BY THE OWNER'S REPRESENTATIVE OR OTHERS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATIONS TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH HEREIN.

Inspectors, and other properly authorized representatives of the OWNER, shall be free always to perform their duties. Intimidation or attempted intimidation of any one of them by the CONTRACTOR or by any of his employees shall be sufficient reason for dismissal of said employee or annulment of the contract.

SC-6. ENVIRONMENTAL PROTECTION.

The CONTRACTOR shall minimize siltation and bank erosion during construction and shall restore disturbed areas to present or better conditions. All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval by either EPA or USDA. Use of all such chemicals and disposal of residue shall be in strict conformance with the instructions.

SC-7. MATERIALS, EQUIPMENT AND WORKMANSHIP.

Unless otherwise specified, all materials and equipment shall be new and shall be of standard quality for the use intended. Reference to a proprietary product of a particular manufacturer or vendor is to establish a standard of quality. The CONTRACTOR may furnish with his bid the name and identifying information of each item upon which his bid is based and if this information is not submitted, he shall be obligated to furnish the product specified.

Approval of samples, shop drawings, etc. shall not mean final acceptance and they shall be subject to inspection and test on delivery and installation. The CONTRACTOR shall repair, replace, and/or adjust any materials or equipment found defective or not operating properly for 1 year after completion and acceptance of his WORK.

The CONTRACTOR shall always require strict discipline and good order among his employees and shall not employ on the WORK any unfit person or anyone not skilled in the WORK assigned to him. Any careless, untrustworthy, or incompetent workers shall be removed upon the request of the ENGINEER or his representative.

SC-8. MATERIALS COMPATIBILITY.

All materials must be compatible with the OWNER'S existing materials concerning interchangeability and appearance unless otherwise specifically approved.

SC-9. SAMPLES.

It shall be the CONTRACTOR'S responsibility to obtain and submit samples of painting, brick and similar "appearance" materials to the ENGINEER for approval as to color, texture, etc.

SC-10. CONSTRUCTION PROCEDURE.

A complete organization, equipment and ample materials shall be on hand before WORK commences. They shall be satisfactory for securing the quality of WORK specified and for continuous progress for the earliest possible completion of the project.

The CONTRACTOR shall provide and maintain a local project or field office and field telephone throughout the term of the project. A representative of the CONTRACTOR should be available to receive notices and messages during working hours and a local telephone shall be maintained for 24 hour emergency calls.

The Resident Inspector shall be permitted access to and use of the CONTRACTOR'S field office to maintain his records and his communications.

Prior to commencement of WORK, the CONTRACTOR shall:

- a. Notify the ENGINEER of the project superintendent's name and telephone number.
- b. Contact utility companies for location and protection of their facilities.
- c. Notify the ENGINEER, 3 days in advance, of when construction will commence.

No underground WORK shall be covered until it has been inspected by the OWNER'S representative.

SC-11. PROGRESS SCHEDULE.

Prior to commencement of WORK, the CONTRACTOR shall submit a Progress Schedule for the ENGINEER'S approval. The schedule shall show the sequence of the WORK for continuous progress. It shall be used for coordination of the OWNER'S operations, for the Inspector's scheduling, and as a basis for justifying a time extension, if required.

The Progress Schedule shall be revised (as required) and updated at the time each payment request is submitted as outlined in the General Conditions.

SC-12. SALVAGED MATERIALS.

Salvaged materials shall remain the property of the OWNER, unless otherwise shown, and shall be removed from the site to the OWNER'S storage yard, or as otherwise directed.

SC-13. RIGHTS-OF-WAY.

The OWNER shall furnish all land and rights-of-way required on this project. He shall obtain all permits and easements for crossings or occupancy of highways, railroads and other public and private property. No WORK shall be begun until the CONTRACTOR has a copy of said permit or easement and can comply with all requirements thereof.

SC-14. PERMITS.

Unless otherwise noted, the CONTRACTOR shall be responsible for the cost of all electric service hookups, Building Permits, Electrical Inspection Permits, Plumbing Permits, etc. and shall arrange for such permits to prevent delay in his WORK.

The CONTRACTOR shall also be responsible for the cost of running new electrical service, if required.

SC-15. WORKING HOURS.

WORK shall not exceed 40 hours per week and no WORK will be done between the hours of 6:00 P.M. and 7:00 A.M. nor on Saturdays, Sundays or legal holidays, without the written approval or permission of the ENGINEER in each case.

SC-16. CLEANUP AND RESTORATION.

The CONTRACTOR shall continuously maintain cleanup operations along the line of WORK and near any structures. Cleanup shall include the removal of all refuse, rubbish, scrap materials and debris and the finish dressing (hand raking, if necessary) of all areas to the satisfaction of the ENGINEER. Restoration shall include maintenance of any settled trenches and landscaping, if required. No item of WORK shall be

considered complete until cleanup and restoration are accomplished and, if not satisfactory in the opinion of the ENGINEER, payment may be withheld until such cleanup and restoration are accomplished.

The Contractor shall protect all shrubbery and shall be responsible for replacing any damaged shrubbery to the property owner's satisfactions. Restoration shall be in accordance with Specification 14.

SC-17. MAINTENANCE OF TRAFFIC AND SAFETY.

The CONTRACTOR shall, at his own expense, provide and maintain suitable accommodations for public and private travel near his WORK. Adequate warning signs, lights, barricades and other safety devices shall be maintained and shall comply with the requirements of any governing agency.

The local fire department, school district, etc. shall be notified of all detours and route changes.

SC-18. EXISTING UTILITIES.

It shall be the CONTRACTOR'S sole responsibility to learn the exact location of all utilities; to notify the utility OWNER; to protect all utilities through his operations; and to pay for any damage that may occur.

The exact location of existing utilities, either aboveground or underground, shall be determined by the CONTRACTOR far enough in advance of the WORK to permit adjustments in alignment or protection of the utility. Existing utilities, if shown on the Plans, are only approximate to alert the CONTRACTOR of their existence.

If the CONTRACTOR fails to locate existing utilities far enough in advance to permit realignment of the WORK, relocation of the existing utility or of the WORK shall be at his expense.

SC-19. MAINTAINING WATER SERVICE.

The CONTRACTOR shall maintain water service to all customers throughout construction and shall organize his WORK for the least inconvenience to all customers and residents. All customers whose water service will be interrupted shall be notified by the CONTRACTOR, in advance, and service shall be restored as soon as possible.

SC-20. PROGRESS PAYMENTS.

The 13th day of the month shall be used as a cut-off date for figuring monthly partial payments. Requests for partial payments shall be submitted for the ENGINEER'S approval not later than the 18th day of the month. Payment of said estimate shall be made by the 20th day of the following month.

Payrolls, with the necessary certification, shall be submitted to the proper authorities in accordance with the applicable regulations and a copy of the transmittal letter and 1 copy of the payroll shall be submitted to the OWNER. One copy of the transmittal letter shall be submitted to the ENGINEER.

SC-21. QUANTITIES OF ESTIMATE.

The quantities of WORK covered by unit prices in the bid are the ENGINEER'S estimates of the WORK to be done and may increase or decrease to complete the WORK contemplated by this project. The CONTRACTOR agrees that payment for any increases or decreases in the quantities shall be based on the unit price bid and that payment shall be made only for the actual WORK performed.

The CONTRACTOR shall verify all quantities before preparing his bid or placing his order.

SC-22. AFFIDAVIT OF PAYMENT.

Upon completion of the WORK, but before the acceptance thereof by the OWNER, the CONTRACTOR shall furnish proof in documentary form that all claims, liens, or other obligations incurred by him and all of his contractors in connection with the performance of the WORK have been properly paid and settled. This information shall be in affidavit form and shall bear the authorization of the surety company, if applicable.

SC-23. FINAL ADJUSTING CHANGE ORDER.

At the end of this project, a final adjusting change order shall be prepared to show overruns and underruns to balance all of the quantities.

SC-24. RECORDS.

The CONTRACTOR shall be responsible for maintaining a set of Record Plans showing the size, type of material and location of all new construction and of any existing facilities located during the WORK.

An extra set of Plans shall be furnished for records and shall be submitted to the ENGINEER at the end of the project for the OWNER'S permanent record.

SC-25. "OR EQUAL" CLAUSE.

It shall be the CONTRACTOR'S responsibility to furnish substantiating data that any product is equal to or better than the proprietary product specified.

SC-26. PROTECTION OF PROPERTY AND PUBLIC LIABILITY.

The CONTRACTOR shall assume full responsibility for the protection of all public and private property both above and below ground where WORK under this project is being performed.

The CONTRACTOR shall indemnify and save harmless the OWNER, the OWNER'S Representatives and the ENGINEER from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought against him due to any act or omission of the said CONTRACTOR, his agents, or employees in the execution of the WORK or in its protection.

Said responsibilities shall apply despite the location of the damage and it shall be the CONTRACTOR'S sole responsibility to make such corrections and adjustments to the satisfaction of those whose property or premises have been damaged by his operation.

SC-27. LIABILITY.

The OWNER or ENGINEER shall not be liable for the safety of persons or property on or about a construction project site, or for the construction techniques, procedures, sequences and schedules, or for the conduct, action, errors, or omissions of the CONTRACTOR, his subcontractors, or his material suppliers, their agents or employees.

Further, it is the CONTRACTOR'S responsibility to protect and save harmless the OWNER and ENGINEER from any suits arising out of claims including the hiring, at his own expense, of the necessary professional help to defend the OWNER and ENGINEER.

The CONTRACTOR is also referred to the General Conditions regarding liability, protection of property, etc.

SC-28. EMERGENCIES.

In an emergency that threatens loss or injury to persons or property, the CONTRACTOR will be allowed to act diligently without previous instructions from the ENGINEER.

Wherever, in the opinion of the ENGINEER, an emergency exists and immediate action is considered necessary, the performance of emergency WORK under the direction of the ENGINEER, with or without notice to the CONTRACTOR, shall in no way relieve the CONTRACTOR of responsibility for damage that may occur.

SC-29. SAFETY AND SANITARY REGULATIONS.

The CONTRACTOR shall comply with all local, State and Federal safety and sanitary regulations that may apply on this project.

SAFETY ON AND AROUND THE JOB SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

SC-30. SHOP DRAWINGS.

In accordance with the General Conditions, the CONTRACTOR shall submit 8 COPIES of Shop Drawings for all materials furnished and certify to their compliance with the Specifications. The CONTRACTOR'S certification shall be as follows:

PROJECT TITLE	_____
CONTRACT:	_____
BID ITEM NO.:	_____
WE CERTIFY THAT THIS SHOP DRAWING SUBMITTAL IS IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS FOR THE ABOVE PROJECT.	
NO EXCEPTION:	_____
EXCEPTION:	_____
APPROVED BY:	_____
DATE:	_____

TWO COPIES of the approved shop drawings shall be returned to the CONTRACTOR.

SC-31. WAGE DETERMINATION.

WORK on this project shall be subject to prevailing wage rates for public works that are current at the time of bidding and are included herein.

The CONTRACTOR, in preparing his bid, agrees to the terms of the prevailing wage rates as part of this project without additional compensation.

SC-32. WEATHER CONDITIONS.

No portion of the WORK shall be constructed under conditions that would adversely affect the quality or efficiency thereof. The CONTRACTOR shall be responsible for protecting his WORK and materials against damage or injury from the weather.

SC-33. TIME EXTENSIONS FOR ABNORMAL WEATHER.

This section specifies the procedure for the determination of time extensions due to abnormal and unforeseeable weather as outlined in the General Conditions, Section 15.4.2. Reference is also made to Section 15.4 regarding prompt written notice.

For the purposes of this section the term "adverse weather day" shall mean a day when construction cannot proceed due to precipitation (not wet conditions caused by precipitation), provided the CONTRACTOR is prevented from working for 50 percent or more of his normal WORK day.

The listing below defines the monthly anticipated adverse weather days (including weekends and holidays) and shall form the "base line" for monthly (or portion thereof) weather time evaluation.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
12	12	10	10	10	8	8	8	7	10	11	11

Upon acknowledgment of the Notice To Proceed, the CONTRACTOR shall keep an accurate and detailed record of actual adverse weather days monthly (including weekends and holidays) and this shall be compared to the anticipated adverse weather days listed above.

Time extensions shall be granted only where adverse weather affects WORK shown on the Progress Schedule.

At the end of each month, the CONTRACTOR shall request from the ENGINEER, in writing, a time extension based on the number of actual adverse days that exceeded the anticipated adverse days. Supporting documentation shall be furnished.

The ENGINEER shall review the information and notify the CONTRACTOR whether the request is justified. If the request is justified, a change order will be processed later.

SC-34. PRECONSTRUCTION CONFERENCE.

The CONTRACTOR shall attend a preconstruction conference with the OWNER, ENGINEER, and any other interested parties prior to commencement of WORK. Construction procedures and requirements shall be outlined and discussed in detail.

SC-35. PROJECT SIGN.

The CONTRACTOR shall furnish and install a project sign as described in the Supplemental General Conditions. The sign shall be located at the entrance to the Industrial Park as directed by the ENGINEER and shall be visible from U. S. Highway 45.

SC-36. BASIS OF BID.

The bid, and all the items and sub-items thereof, shall be made on the attached form that shall be filled out completely. All the costs of the WORK and payment therefor shall be included in the lump-sum and unit prices set forth in the proposal form. No item of WORK that is required by the CONTRACT DOCUMENTS shall be paid for outside of, or in addition to, the prices submitted on the proposal form unless specifically authorized by a proper change order and unit prices shall control.

The following is to clarify the basis of bidding:

CONTRACT "A".

1. Mobilization/Demobilization.

Mobilization/Demobilization cost on this project shall be shown as 1 lump sum and may include the cost of insurance, bonds, site office, moving equipment, etc. Mobilization/demobilization shall not exceed 4 per cent of the total construction cost. Payment of mobilization/demobilization shall be as follows:

- 70% with the first monthly estimate.
- 30% when the project is 95 per cent complete.

2. Water Mains.

Payment for water mains (including jointing materials) shall be at the unit price bid per lineal foot, for each size and type of pipe, and shall include excavation, furnishing, laying, connections, embedment, testing, disinfecting and backfilling. Measurement for payment will be straight through with no deduction for the length of fittings.

3. Fittings.

Payment for iron fittings shall be at the unit price bid per pound based on published weights for compact (AWWA C153) M.J. fittings not including accessories and cement linings. Unit prices shall be the one average price bid per pound for the fitting size shown (largest pipe size of fitting).

Payment for PVC fittings (3 inches and smaller) shall be at the average unit price bid.

Payment shall include installation and blocking/anchorage/restraint.

4. Valves W/ Cast Iron Box.

Payment for valves with the valve box shall be at the unit price bid for each size and shall include furnishing and installation complete.

5. Special Fittings.

Payment for special fittings, tapping sleeves, inserting valves, etc., shall be made at the unit price bid for each size and/or type and shall include furnishing and installation complete.

6. Clamps and Couplings.

Payment for clamps and couplings, for jointing and repairing all types and sizes of pipes, shall be at the average unit price bid for each size pipe. Payment shall include installation complete. No payment shall be allowed where the Contractor skips for road crossings, bores, etc., instead of pipe laying straight through or continuous.

7. Tie-ins.

Payment for a tie-in, where shown on the Plans, shall be for labor and equipment only where tie-in is made to an existing line or tank with standard fittings. Payment for all materials required shall be made under a separate bid item. A wet tie-in made with special fittings (tapping sleeves, inserting valves, saddles, etc.) shall be included in the cost of the special.

8. Fire Hydrants.

Payment for fire hydrants shall be at the unit price bid per hydrant and shall include the hydrant, thrust blocking, gravel or stone drain and extensions (if required) installed complete. Payment for valves (if required), connecting pieces, couplings, and all fittings shall be made under a separate bid item.

9. Air Release Valves W/Box.

Payment for air release valves shall be at the unit price bid for each valve and shall include the box and cover, all accessories and installation complete.

10. Bore With Casing.

Payment for a bore with casing shall be made at the unit price bid per lineal foot for the size casing required and shall include the bore, casing and installation complete. Payment for the carrier pipe (same material as other mains) shall be made under a separate bid item. Measurement will be made by the minimum length of casing required by the permit or specified by the Engineer.

11. Crushed Stone.

Payment for all grades of crushed stone in place, at authorized locations, shall be at the unit price bid per cubic yard. Authorized locations include resurfacing, special foundations and backfill under permanent surface. Measurement for payment for resurfacing shall be based on the normal trench width plus 1 foot times the length of the surface crossed times a compacted thickness of 6 inches. Measurement for payment for special foundations and backfill under a permanent surface shall be based on the normal trench width times the length required times the depth as directed by the Engineer. Payment shall not be made for replacement due to settlement or for pipe embedment.

12. Concrete Encasement.

Payment for concrete pipe encasement shall be made at the unit price bid per lineal foot in place, at authorized locations.

13. Asphalt Pavement Replacement.

Payment for asphalt pavement replacement shall be at the unit price bid per square yard for 2 inch compacted thickness. Measurement of the area for payment shall be based on the normal trench width plus 2 feet times the length of the surface crossed. Payment for other depths, approved by the Engineer, shall be proportioned. Payment shall not include replacement due to settlement.

14. Concrete Pavement Replacement.

Payment for concrete pavement replacement, at authorized locations, shall be at the unit price bid per cubic yard of concrete in place and shall include all materials and finishing to match the existing surfaces. Measurement for payment shall be based on the normal trench width plus 1 foot times the length of the surface crossed times the depth required to match the existing surface or as directed by the Engineer. Replacement due to settlement shall be at the Contractor's expense.

15. Elevated Tank General.

Payment for the elevated tank general shall be at the lump sum bid for all miscellaneous work at the elevated tank site as shown on the Plans. This shall include (a) entrance and parking area; (b) all electric service to the Tank Contractor's junction box approximately 5 feet above the ground on a tank leg; (c) all site work; (d) tank piping to the Tank Contractor's stubout from the riser pipe; (e) fencing and gate; and (f) all miscellaneous work. This work does not include the elevated tank, tank foundation, tank overflow and splash pad which are included in Contract "B". Distribution materials (piping, fittings, valves, hydrants, etc.) shall be paid for separately at the unit prices bid.

16. Check Valve Removal.

Payment for check valve removal shall be at the unit price bid for the complete removal of existing check valves, where specified on the Plans, and shall include delivery of removed check valves to the Owner's storage yard. Distribution materials (piping, fittings, valves, etc.) shall be paid for separately at the unit prices bid.

17. Lowes Master Meter.

Payment for the master meter shall be at the lump sum bid for the installation complete and shall include the meter; flow on/off valve; vault; bypass piping; site work; electrical; and all piping inside the vault.

18. Treatment Building Addition.

Payment for the treatment building addition shall be at the lump sum bid for all work complete in accordance with the Plans and Specifications. The cost breakdown of component parts of this bid item shall be complete and the total must equal the lump sum amount bid. The breakdown may be used for additions, deletions and/or a basis for partial payments.

19. Radio Controls.

Payment for radio controls shall be at the lump sum bid for each system complete and shall include all materials, equipment and work as specified including radios, license, antennae, enclosures, chart recorder, control equipment, electrical, etc.

GENERAL DECISION KY980025 08/14/98 **KY25**
 General Decision Number KY980025

RECEIVED SEP 11 1998

Superseded General Decision No. KY970025

State: Kentucky

Construction Type:

HEAVY
 HIGHWAY

County(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

Heavy and Highway Construction Projects

Modification Number	Publication Date
0	02/13/1998
1	02/20/1998
2	04/03/1998
3	05/22/1998
4	06/05/1998
5	06/19/1998
6	07/06/1998
7	07/24/1998
8	08/14/1998

COUNTY(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

BRIN0004C 04/01/1998

CRITTENDEN, DAVISS, HANCOCK, HENDERSON, LIVINGSTON, MCLEAN,
 OHIO, UNION & WEBSTER COUNTIES:

BRICKLAYERS	21.61	5.15
-------------	-------	------

BRTN0004E 05/01/1997

ALLEN, BALLARD, BUTLER, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN,
 EDMONSON, FULTON, GRAVES, HICKMAN, HOPKINS, LOGAN, LYON,
 MARSHALL, MCCRACKEN, MUHLENBERG, SIMPSON, TODD, TRIGG & WARREN
 COUNTIES:

BRICKLAYERS	19.09	1.60
-------------	-------	------

CARP0357C 07/01/1998

	Rates	Fringes
CARPENTERS	18.45	4.93
PILEDRIVERMEN	18.70	4.93
DIVERS	28.05	4.93

CARP1031M 06/01/1998

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:		
MILLWRIGHTS	20.20	7.95

CARP1080E 06/16/1997

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, TODD & TRIGG COUNTIES:		
MILLWRIGHTS	19.05	5.37

CARP1080G 06/01/1997

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		
MILLWRIGHTS	19.40	6.67

ELEC0369I 06/01/1998

	Rates	Fringes
BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:		
ELECTRICIANS	22.25	6.34

ELEC0429B 01/01/1994

	Rates	Fringes
ALLEN & SIMPSON COUNTIES:		
ELECTRICIANS	15.85	4.115

ELEC0816E 06/01/1997

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:		

ELECTRICIANS:		
Electricians	21.22	6.41
Cable Splicers	21.47	6.45

ELEC1701C 06/01/1997

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		

ELECTRICIANS:		
Electricians	20.38	6.62

SC-12

Heilarc Welding; & Cable Splicing	20.63	6.67
-----------------------------------	-------	------

ELEC1925B 01/01/1994

	Rates	Fringes
FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):		

ELECTRICIANS	15.00	4.25
--------------	-------	------

ENGI0181X 01/01/1998

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	19.55	5.90
GROUP 2	17.13	5.90
GROUP 3	17.51	5.90
GROUP 4	16.87	5.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Central Compressor Plant; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Elevating Grader & Loaders; Grade-All; Gurrries; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; & Truck Crane

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES WITH BOOMS 150 ft. & Over (Including JIB) \$.50 Premium

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0070G 06/01/1998

	Rates	Fringes
BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);		

EDMONSON COUNTY (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden):

IRONWORKERS:

Structural; Ornamental; Reinforcing; Precast Concrete Erectors	20.26	9.32
--	-------	------

IRON0103E 04/01/1998

	Rates	Fringes
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs Creek);		

CALDWELL COUNTY (Northeastern third, including the Township of Creswell);

CHRISTIAN COUNTY (Northern third, including the Townships of Apex, Crofton, Kelly, Mannington & Wynns);

CRITTENDEN COUNTY (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove & Tribune);

MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly, South Carrollton, Tarina & Weir);

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:

IRONWORKERS	20.35	8.80
-------------	-------	------

IRON0492C 05/01/1998

	Rates	Fringes
BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury);		

CHRISTIAN COUNTY (Eastern two-thirds, including the Townships of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

EDMONSON COUNTY (Southern fourth, including the Townships of Chalybeate & Rocky Hill);

MUHLENBERG COUNTY (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood);

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES:

IRONWORKERS	16.48	4.87
-------------	-------	------

IRON0782H 05/01/1998

Rates Fringes

CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);

CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told);

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

IRONWORKERS:

Projects with a total contract cost of \$20,000,000.00 or above	19.40	8.81
All Other Work	18.10	7.77

LABO0189E 07/01/1998

	Rates	Fringes
LABORERS:		
GROUP 1	14.97	4.53
GROUP 2	15.22	4.53
GROUP 3	15.27	4.53
GROUP 4	15.87	4.53

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Drill Tender; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; & Wrecking of Concrete Form

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving

Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; & Wagon Driller

GROUP 3 - Air Track Driller; Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Powderman & Blaster; Side Rail Setter; Rail Paved Ditch; Screw Operator; Tunnel (Free Air); & Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste -
Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; &
Tunnel Mucker (Free Air)

PAIN0032E 07/01/1997

	Rates	Fringes
BALLARD COUNTY:		
PAINTERS:		
Bridges & Dams	22.40	5.03
All Other Work	18.10	5.03

Epoxy or Toxic; Lead-Based Paint Work - \$1.50 Premium

PAIN0118C 05/01/1998

	Rates	Fringes
EDMONSON COUNTY:		
PAINTERS:		
Brush	15.57	4.00
Abrasive Blaster; Fireproofing; Lead Abatement; Spray; & Waterblasting 4000 PSI and Above	16.07	4.00

PAIN0156G 04/01/1998

	Rates	Fringes
DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:		
PAINTERS:		
BRIDGES, LOCKS & DAMS:		
GROUP 1	20.65	5.18
GROUP 2	20.90	5.18
GROUP 3	21.65	5.18
GROUP 4	22.65	5.18
ALL OTHER WORK:		
GROUP 1	19.50	5.18
GROUP 2	19.75	5.18
GROUP 3	20.50	5.18
GROUP 4	21.50	5.18

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast;
Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch
Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar
Epoxy

PAIN0456D 05/01/1997

	Rates	Fringes
--	-------	---------

ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN
COUNTIES:

PAINTERS:

Brush	14.63	3.75
Spray; Sandblast; Boswain Chair or Heights over 50 feet	15.13	3.75

PAIN0500C 05/01/1998

CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON,
GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN
& TRIGG COUNTIES:

PAINTERS:

Bridges & Dams	19.00	4.52
All Other Work	14.75	4.52

Spray, Sandblasting & Waterblasting - units with 3500 PSI and
above - \$.50 premium

Work 40 ft. and above ground level - \$1.00 premium

* PLUM0107E 08/01/1998

ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:

PLUMBERS; GAS FITTERS:

Plumbing contracts less than \$150,000.00	17.24	5.17
All Other Plumbing contracts	22.16	5.17

PLUM0184C 07/01/1998

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,
FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN
& TRIGG COUNTIES:

PLUMBERS & STEAMFITTERS	22.08	6.51
-------------------------	-------	------

* PLUM0522C 08/01/1998

ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:

PIPEFITTERS & STEAMFITTERS	23.40	6.45
----------------------------	-------	------

PLUM0633B 01/01/1998

DAVISS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG,
OHIO, TODD, UNION & WEBSTER COUNTIES:

PLUMBERS & PIPEFITTERS	21.935	5.38
------------------------	--------	------

TEAM0089C 03/31/1998

TRUCK DRIVERS:
ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:

GROUP 1	15.59	7.025
GROUP 2	15.82	7.025
GROUP 3	15.89	7.025
GROUP 4	15.90	7.025

BALLARD, CALLOWAY, CALDWELL, CARLISLE, CHRISTIAN, CRITTENDEN,
 FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCrackEN,
 TODD & TRIGG COUNTIES:

GROUP 1	19.74	2.95
GROUP 2	19.97	2.95
GROUP 3	20.04	2.95
GROUP 4	20.05	2.95

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO,
 UNION & WEBSTER COUNTIES:

GROUP 1	17.23	6.05
GROUP 2	17.46	6.05
GROUP 3	17.53	6.05
GROUP 4	17.54	6.05

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Greaser, Tire Changer

GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump & Flatbed; Terrain Vehicle when used
 to haul materials; Semi-Trailer or Pole Trailer when used to

pull building materials & equipment; Tandem Axle Dump;
 Distributor; & Mixer

GROUP 4 - Euclid, Other Heavy Earthmoving Equipment & Lowboy;
 Articulator Cat Truck & 5 Axle Vehicle; Winch & A-Frame when
 used in transporting materials; Ross Carrier; Fork Lift Truck
 when used to transport building materials; & Drivers on
 Pavement Breaker

 WELDERS - Receive rate prescribed for craft performing operation
 to which welding is incidental.
 =====

Unlisted classifications needed for work not included within
 the scope of the classifications listed may be added after
 award only as provided in the labor standards contract clauses
 (29 CFR 5.5(a)(1)(v)).

 In the listing above, the "SU" designation means that rates
 listed under that identifier do not reflect collectively
 bargained wage and fringe benefit rates. Other designations
 indicate unions whose rates have been determined to be
 prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can
 be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a
 position on a wage determination matter

* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

NOTICE

THIS DETERMINATION APPLIES TO
PROJECT NO. 083-2-0021-98-3

COMMISSIONER'S CURRENT REVISION
KENTUCKY PREVAILING WAGE DETERMINATION
GRAVES COUNTY

Determination No. CR-3-083

Date of Determination: February 17, 1998

This schedule of the prevailing rate of wages for Graves County has been determined in accordance with the provisions of KRS 337.505 to 337.550. The commissioner has chosen to adopt the prevailing wages as determined by the United States Department of Labor for this county. This determination shall be referred to as Prevailing Wage Determination No. CR-3-083, which includes General Decision Nos. KY980029 for Building Construction and KY980025 for Heavy/Highway Construction. This will also include any modifications since the original publication date of this determination.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) per day, or in excess of forty (40) per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one workday, but not more than ten (10) hours worked in any one workday, if such written agreement is prior to the over eight (8) hours in a workday actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

Page Two
CR-3-083
February 17, 1998

NOTE: The type of construction shall be determined by applying the following definitions.

BUILDING CONSTRUCTION


Building construction is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. It includes all construction of such structures, the installation of utilities and the installation of equipment, both above and below grade level, as well as incidental grading, utilities and paving.

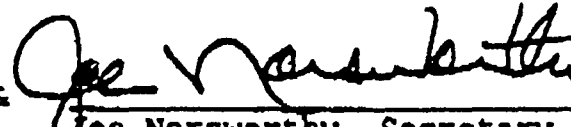
HIGHWAY CONSTRUCTION

Highway construction includes the construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction. It includes all incidental construction in conjunction with the highway construction project.

HEAVY CONSTRUCTION

Heavy projects are those projects that are not properly classified as either "building" or "highway". For example, dredging projects, water and sewer line projects, dams, flood control projects, sewage treatment plants and facilities, and water treatment plants and facilities are considered heavy.


Dennis J. Langford, Director
Employment Standards,
Apprenticeship & Training
Kentucky Labor Cabinet


Joe Norsworthy, Secretary
Kentucky Labor Cabinet
Frankfort, Kentucky 40601

This 17th day of February, 1998.

GENERAL DECISION KY980025 08/14/98 KY25
 General Decision Number KY980025

Superseded General Decision No. KY970025

State: Kentucky

Construction Type:
 HEAVY
 HIGHWAY

County(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

Heavy and Highway Construction Projects

Modification Number	Publication Date
0	02/13/1998
1	02/20/1998
2	04/03/1998
3	05/22/1998
4	06/05/1998
5	06/19/1998
6	07/06/1998
7	07/24/1998
8	08/14/1998

COUNTY(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

BRIN0004C 04/01/1998

Rates Fringes
 CRITTENDEN, DAVIESS, HANCOCK, HENDERSON, LIVINGSTON, MCLEAN,
 OHIO, UNION & WEBSTER COUNTIES:

BRICKLAYERS 21.61 5.15

BRTN0004E 05/01/1997

Rates Fringes
 ALLEN, BALLARD, BUTLER, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN,
 EDMONSON, FULTON, GRAVES, HICKMAN, HOPKINS, LOGAN, LYON,
 MARSHALL, MCCRACKEN, MUHLENBERG, SIMPSON, TODD, TRIGG &
 WARREN
 COUNTIES:

BRICKLAYERS 19.09 1.60

CARP0357C 07/01/1998

Rates Fringes
 CARPENTERS 18.45 4.93
 PILEDRIVERMEN 18.70 4.93
 DIVERS 28.05 4.93

CARP1031M 06/01/1998

Rates Fringes
 ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:

MILLWRIGHTS 20.20 7.95

CARP1080E 06/16/1997

Rates Fringes
 BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,
 FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL,
 MCCRACKEN, TODD & TRIGG COUNTIES:

MILLWRIGHTS 19.05 5.37

CARP1080G 06/01/1997

Rates Fringes
 DAVIESS, HANCOCK, HENDERSON, MCLEAN, MUHLENBERG, OHIO, UNION &
 WEBSTER COUNTIES:

MILLWRIGHTS	19.40	6.67

ELEC0369I 06/01/1998

	Rates	Fringes
BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:		

ELECTRICIANS	22.25	6.34

ELEC0429B 01/01/1994

	Rates	Fringes
ALLEN & SIMPSON COUNTIES:		

ELECTRICIANS	15.85	4.115

ELEC0816E 06/01/1997

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:		

ELECTRICIANS:		
Electricians	21.22	6.41
Cable Splicers	21.47	6.45

ELEC1701C 06/01/1997

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		

ELECTRICIANS:		
Electricians	20.38	6.62
Heilarc Welding; & Cable Splicing	20.63	6.67

ELEC1925B 01/01/1994

	Rates	Fringes
FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):		

ELECTRICIANS	15.00	4.25

ENGI0181X 01/01/1998

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	19.55	5.90
GROUP 2	17.13	5.90
GROUP 3	17.51	5.90
GROUP 4	16.87	5.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Central Compressor Plant; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Elevating Grader & Loaders; Grade-All; Gurrries; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; & Truck Crane

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine;
 Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler;
 Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack;
 Oiler; Paving Joint Machine; Power Form Handling Equipment;
 Pump; Roller (Earth); Steerman; Tamping Machine; Tractor
 (Under 50 H.P.); & Vibrator

CRANES WITH BOOMS 150 ft. & Over (Including JIB) \$.50 Premium

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%
 ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0070G 06/01/1998

	Rates	Fringes
BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);		

EDMONSON COUNTY (Northern three-fourths, including the Townships
 of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock,
 Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish
 &
 Sweden):

IRONWORKERS:

Structural; Ornamental;
 Reinforcing; Precast Concrete
 Erectors

20.26

9.32

IRON0103E 04/01/1998

	Rates	Fringes
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs Creek);		

CALDWELL COUNTY (Northeastern third, including the Township of
 Creswell);

CHRISTIAN COUNTY (Northern third, including the Townships of
 Apex, Crofton, Kelly, Mannington & Wynns);

CRITTENDEN COUNTY (Northeastern half, including the Townships of
 Grove, Mattoon, Repton, Shady Grove & Tribune);

MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction,

Benton, Brennen, Browder, Central City, Cleaton, Depoy,
 Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City,
 Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly,
 South Carrollton, Tarina & Weir);

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION &
 WEBSTER COUNTIES:

IRONWORKERS	20.35	8.80

IRON0492C 05/01/1998

	Rates	Fringes
BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury);		

CHRISTIAN COUNTY (Eastern two-thirds, including the Townships of
 Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville,
 Pembroke & Thompsonville);

EDMONSON COUNTY (Southern fourth, including the Townships of
 Chalybeate & Rocky Hill);

MUHLENBERG COUNTY (Southern eighth, including the Townships of
 Dunnior, Penrod & Rosewood);

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES:

IRONWORKERS	16.48	4.87

IRON0782H 05/01/1998

	Rates	Fringes
CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);		

CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex,
 Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon,
 Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

CRITTENDEN COUNTY (Southwestern half, including the Townships of
 Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan
 &
 Told);

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON,
 LYON, MARSHALL, MCCrackEN & TRIGG COUNTIES:

IRONWORKERS:

Projects with a total contract cost of \$20,000,000.00 or above	19.40	8.81
All Other Work	18.10	7.77

LABO0189E 07/01/1998

LABORERS:	Rates	Fringes
GROUP 1	14.97	4.53
GROUP 2	15.22	4.53
GROUP 3	15.27	4.53
GROUP 4	15.87	4.53

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement
 Worker;

Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender;
 Cement Mason Tender; Cleaning of Machines; Concrete;
 Demolition; Dredging; Drill Tender; Environmental - Nuclear,
 Radiation, Toxic & Hazardous Waste - Level D; Flagperson;
 Grade

Checker; Hand Digging & Hand Back Filling; Highway Marker
 Placer; Landscaping, Mesh Handler & Placer; Puddler;
 Railroad;

Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail &
 Fence

Installer; Signal Person; Sound Barrier Installer; Storm &
 Sanitary Sewer; Swamper; Truck Spotter & Dumper; &
 Wrecking of
 Concrete Form

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
 Brickmason

Tender; Mortar Mixer Operator; Burner & Welder; Bushammer;
 Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man;
 Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic
 & Hazardous Waste - Level C; Forklift Operator for Masonary;
 Form Setter; Green Concrete Cutting; Hand Operated Grouter &
 Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving

Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven

Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
Precast

Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand
Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator;
& Wagon Driller

GROUP 3 - Air Track Driller; Asphalt Luteman & Raker; Gunnite
Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator;
Powderman & Blaster; Side Rail Setter; Rail Paved Ditch;
Screw
Operator; Tunnel (Free Air); & Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
-
Levels A & B; Miner & Driller (Free Air); Tunnel
Blaster; &
Tunnel Mucker (Free Air)

PAIN0032E 07/01/1997

	Rates	Fringes
BALLARD COUNTY:		
PAINTERS:		
Bridges & Dams	22.40	5.03
All Other Work	18.10	5.03

Epoxy or Toxic; Lead-Based Paint Work - \$1.50 Premium

PAIN0118C 05/01/1998

	Rates	Fringes
EDMONSON COUNTY:		
PAINTERS:		
Brush	15.57	4.00
Abrasive Blaster; Fireproofing; Lead Abatement; Spray; &		
Waterblasting 4000 PSI and Above	16.07	4.00

PAIN0156G 04/01/1998

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:		

PAINTERS:

BRIDGES, LOCKS & DAMS:

GROUP 1	20.65	5.18
GROUP 2	20.90	5.18
GROUP 3	21.65	5.18
GROUP 4	22.65	5.18

ALL OTHER WORK:

GROUP 1	19.50	5.18
GROUP 2	19.75	5.18
GROUP 3	20.50	5.18
GROUP 4	21.50	5.18

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast;
Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch
Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar
Epoxy

PAIN0456D 05/01/1997

ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN
COUNTIES:

PAINTERS:

	Rates	Fringes
Brush	14.63	3.75
Spray; Sandblast; Boswain Chair or Heights over 50 feet	15.13	3.75

PAIN0500C 05/01/1998

CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON,
GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN
& TRIGG COUNTIES:

PAINTERS:

Bridges & Dams	19.00	4.52
All Other Work	14.75	4.52

Spray, Sandblasting & Waterblasting - units with 3500 PSI and above - \$.50 premium

Work 40 ft. and above ground level - \$1.00 premium

* PLUM0107E 08/01/1998

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:		

PLUMBERS; GAS FITTERS:

Plumbing contracts less than \$150,000.00	17.24	5.17
All Other Plumbing contracts	22.16	5.17

PLUM0184C 07/01/1998

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,		

FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

PLUMBERS & STEAMFITTERS	22.08	6.51
-------------------------	-------	------

* PLUM0522C 08/01/1998

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:		

PIPEFITTERS & STEAMFITTERS	23.40	6.45
----------------------------	-------	------

PLUM0633B 01/01/1998

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, TODD, UNION & WEBSTER COUNTIES:		

PLUMBERS & PIPEFITTERS	21.935	5.38
------------------------	--------	------

TEAM0089C 03/31/1998

	Rates	Fringes
TRUCK DRIVERS:		

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:

GROUP 1	15.59	7.025
GROUP 2	15.82	7.025
GROUP 3	15.89	7.025
GROUP 4	15.90	7.025

BALLARD, CALLOWAY, CALDWELL, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCrackEN, TODD & TRIGG COUNTIES:

GROUP 1	19.74	2.95
GROUP 2	19.97	2.95
GROUP 3	20.04	2.95
GROUP 4	20.05	2.95

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:

GROUP 1	17.23	6.05
GROUP 2	17.46	6.05
GROUP 3	17.53	6.05
GROUP 4	17.54	6.05

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Greaser, Tire Changer

GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump & Flatbed; Terrain Vehicle when used to haul materials; Semi-Trailer or Pole Trailer when used to pull building materials & equipment; Tandem Axle Dump; Distributor; & Mixer

GROUP 4 - Euclid, Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat Truck & 5 Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Fork Lift Truck when used to transport building materials; & Drivers on Pavement Breaker

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter
- a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an

interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

SPECIFICATION 1

DISTRIBUTION SYSTEM AND PIPING

1-1. GENERAL.

This Specification pertains to furnishing all materials and construction of the complete distribution system. The intent herein is to be in accordance with the AWWA and the National Sanitation Foundation Standards that shall complement these Specifications.

In an existing system all materials must be compatible with the existing materials with regard to wrench sizes, operation, interchangeability and appearance (fire hydrants) unless otherwise specifically shown or approved.

1-2. MATERIALS.

1-2.1. DISTRIBUTION MAINS.

Distribution mains and fittings of a particular material shall be the product of one manufacturer. Jointing materials, including rubber gaskets, packing glands, flanges, bolts, lubricants, solvents, etc., shall be as recommended by the pipe manufacturer, shall comply with AWWA Standards and shall withstand a safe working pressure of not less than 150 psi, unless otherwise shown.

a. Iron Pipe.

Ductile iron pipe shall be AWWA C151 (ANSI A21.51). All iron pipe shall have cement-mortar lining conforming with AWWA C104 (ANSI A21.4). Jointing shall be with push-on or mechanical joints for Class 50 (150 psi working pressure) pipe.

b. Plastic Pipe.

Plastic pipe shall conform with ASTM D 2241 polyvinyl chloride (PVC) pressure pipe, 1-1/2 inches through 12 inches and shall bear the National Sanitation Foundation seal. Unless otherwise shown the pipe shall be SDR26, pressure rated at 160 psi. Jointing shall be with rubber ring gaskets.

PVC pipe, 14 inches through 30 inches, shall have an integral bell and spigot joints and shall be in accordance with AWWA C905. Pipe shall be DR18 unless otherwise shown.

1-2.2. FITTINGS.

All fittings larger than 3 inches shall be gray iron or ductile iron. All fittings, 3 inches and smaller, shall be PVC.

Iron fittings shall comply with AWWA C110 (ANSI A21.10) or AWWA C153 (ANSI A21.53) and the inside of the fittings shall be cement-mortar lined in accordance with AWWA C104. The outside coating shall be bituminous material approximately one mil thick. Rubber gaskets shall conform with AWWA C111 (ANSI A21.11).

1-2.3.

VALVES.

a. Gate Valves.

Gate valves larger than 2 inches shall be iron body, bronze mounted, with a nonrising stem and shall comply with AWWA C500 (double-disc) or AWWA C509 (resilient-seated). Valves below ground shall be wrench operated; valves above grade shall be wheel or lever operated; and all valves shall operate clockwise to close. All valves, 2 inches and smaller, shall be bronze body.

b. Butterfly Valves.

Butterfly valves, 2 inches through 20 inches, shall conform with AWWA C504 and shall have a minimum working pressure or rating of 150 psi. They shall have semi-steel or cast iron bodies with lug end connections for use with flanged CIP. The shaft seal shall be hycar and the seat shall be neoprene. They shall have bronze discs, 416 stainless steel shafts and bronze bearings. Valves below ground shall operate with a square nut through a worm gear and 3 operating wrenches shall be furnished for each size operating nut. For valves above grade, the actuator shall be of the lever type with 10 position or adjustable memory stops as shown on the Plans. All valves shall close clockwise and open counterclockwise.

Butterfly valves shall be installed in the distribution system with flanged to mechanical joint connecting pieces.

c. Valve Boxes.

Valve boxes shall be cast iron if located where subject to traffic. PVC boxes may be used at other locations. All valve boxes shall be adjustable with a minimum adjustment of 3 inches either higher or lower. Boxes for 2 inch through 14 inch valves shall have a 5-1/4 inch shaft diameter and the covers shall be cast iron with the word "WATER" cast in the top surface.

d. Valve Wrenches.

Three valve wrenches, approximately 6 feet in length, shall be furnished for each different type and/or size required.

e. Air Valves.

Air valves, either air release or combination air release and air vacuum, shall have a cast iron body, stainless steel trim and floats and a working pressure of 300 psi. They shall be direct acting or simple lever-type with full ported valves; parts shall be interchangeable; and they shall not require special tools for maintenance. The size and type air valve shall be as shown on the Plans.

All air valves shall be mounted upright on the main with a service clamp and shall have a shutoff valve between the air valve and the main. They shall be installed in a 30 inch I.D. by 30 inch deep valve box (CMP, PVC, clay or concrete) having a cast iron frame and locking, solid lid, Neenah Foundry R-5900 series, or equal.

The box shall be centered on the valve, shall be set plumb with the top slightly above grade and shall be filled from the bottom of the main to 4 inches below the shutoff valve with No. 57 crushed stone.

1-2.4. FIRE HYDRANTS.

Fire hydrants shall be three-way with two 2-1/2 inch hose nozzles and one 4-1/2 inch pumper nozzle and shall comply with AWWA C502. Hose connections and operating nuts shall be National Standard. The minimum valve opening shall be 5-1/4 inches, shall close with the pressure and shall remain closed if the hydrant barrel is broken or damaged. The hydrant shall have a replaceable, breakable flange or section. The operating nut shall be a pentagon shape, shall operate counterclockwise to open, and an "open" direction arrow shall be cast in the bonnet. The normal depth of bury shall be 42 inches. Three hydrant wrenches and one replaceable, breakable flange shall be furnished.

All hydrants shall be painted with a primer coat equal to Rustoleum No. 960 primer and a finish coat of "Fire Hydrant Red" equal to Rustoleum No. 1210.

1-2.5. FLUSH HYDRANTS.

Flush hydrants shall be of the post type having 150 psi working pressure, 2-1/8 inch valve opening and a single 2-1/2 inch hose nozzle. In all other respects, the flush hydrant shall be the same as the standard fire hydrant

1-2.6. TAPPING, CUT-IN AND REPAIR MATERIALS.

a. Tapping Sleeves.

Tapping sleeves shall be Class 125 (ASA B16.1) similar to Mueller H-615. Stainless steel tapping sleeves may be used in lieu of ductile iron.

b. Tapping Crosses.

The tapping crosses shall be Class 125 (ASA B16.1) similar to Mueller H-715.

c. Tapping Valves.

Tapping valves shall be Class 125 (ASA B16.1) similar to Mueller H-667 for mechanical joint pipe or H-642 for asbestos cement pipe.

d. Split Repair Sleeves.

Split repair sleeves shall have 150 psi working pressure similar to Mueller H-777 for asbestos cement pipe and 200 psi working pressure similar to Mueller H-785 for mechanical joint pipe.

e. Cut-In Sleeves and Valves.

Cut-in sleeves shall be similar to Mueller H-840, or equal, and cut-in valves shall be similar to Mueller H-862, or equal.

f. Inserting Valves.

Inserting valves shall be similar to Mueller H-800.

g. Repair Clamps.

Repair clamps shall be stainless steel, fully gasketed and pressure rated to match or exceed the pipe on which it is to be installed. Unless otherwise directed, repair clamps shall be used only on PVC pipe and shall be similar to Mueller 500 Series.

1-2.7.

SERVICE LINES.

a. Plastic Pipe.

Plastic pipe and fittings for service lines shall conform with AWWA C901 for polyethylene pipe and AWWA C902 for polybutylene pipe, shall have a pressure rating of 200 psi and shall bear the National Sanitation Foundation seal.

b. Copper Pipe.

Copper pipe for service lines shall conform with ASTM B-88, "Type K".

c. Service Line Accessories.

Corporation stops, curb stops, service fittings, etc., shall be of the finest quality bronze or brass as manufactured by Hays, Mueller, Ford or equal.

1-2.8.

SERVICE METERS.

All service meters shall be of the nutating disc type or oscillating piston type and shall be straight reading in U. S. gallons. They shall have a magnetic coupled drive and shall comply with AWWA C700.

Residential meters, unless otherwise noted, shall be 5/8 inch x 3/4 inch size. All meters 5/8 inch through 1 inch shall be installed in a meter yoke. One and one-half inch and 2 inch meters shall have flanged ends with suitable adaptors and shall have an accuracy of 100 plus or minus 1.5 percent of actual thruput.

a. Meter Yokes.

Meter yokes shall have a horizontal inlet and outlet and shall have multipurpose end connections with a 1/4 turn stop and a lock wing stop on the inlet side. The height of the yoke shall be approximately 7 inches and it shall securely support the meter in a horizontal position. Meter yokes shall be Ford, Mueller, or equal.

b. Meter Boxes.

Meter boxes may be plastic, clay or concrete with an inside area equivalent to an 18 inch diameter. They shall be 24 inches deep with cut-outs for the service lines.

Covers shall be cast iron, painted with a coal tar enamel and shall have an 11 inch minimum diameter (or equivalent) opening. The lid shall be equipped with a lock and lifting device and a total of three keys shall be furnished.

Standard covers (not subject to traffic) shall weigh 30 to 40 pounds and shall be Mueller H-10810, Ford No. A 32, Neenah R-1914-B, or equal.

Extra heavy covers (subject to light traffic) shall be Ford No. A 32H, Neenah R-1914-B, or equal.

Boxes, for meters 1-1/2 inches and larger, shall be brick masonry or concrete approximately 30 inches deep and large enough to permit convenient service or removal of the meter. Frames and lids shall be cast iron, shall have a locking device and shall have the word "WATER" cast in the top. They shall be Ford Monitor covers or Ford rectangular meter pit covers, or equal.

1-2.9. CASING PIPE.

Casing pipe shall be seamless or continuous welded steel pipe having a minimum wall thickness of 0.25 inches and a minimum yield strength of 35,000 psi.

1-2.10. WATER MAIN LOCATORS.

a. Identifying/Detectable Tape.

Identifying/detectable tape shall be a minimum of 3 inches wide, shall be inert plastic film, highly resistant to acids and alkalis and a bright color. It shall be imprinted with "WATER LINE BELOW" and shall be "Terratape Detectable" or equal.

b. Tracer Wire.

Tracer wire shall be 12 gauge insulated copper wire and shall be suitable for underground installation. The tracer wire shall be securely attached to all valves, fire hydrants, flush hydrants, etc. Splices shall be made in a manner to insure conductivity.

1-2.11. RIVER CROSSING PIPE.

River crossing pipe shall be Class 5 ductile iron, 0.42 metal thickness and shall be boltless, similar to "Usiflex" as manufactured by U. S. Pipe, or equal.

1-3. CONSTRUCTION.

1-3.1. RESPONSIBILITY FOR MATERIALS.

The Contractor shall be responsible for all materials furnished by him and shall replace at his own expense all materials found defective or not complying with these Specifications. His responsibility shall be in effect for 1 year after acceptance by the Owner.

1-3.2. ALIGNMENT AND GRADE.

The water line shall be located as shown on the Plans and shall be parallel with streets and property lines where possible. It shall have a minimum cover of 42 inches. Through areas where an adjacent roadbed is in a cut section, the main shall be laid to a minimum depth of 36 inches below the centerline crown elevation of the adjacent road or street but shall not exceed a depth of 7 feet. Exceptions to this requirement (deeper or more shallow) shall be authorized, in specific cases, by the Engineer. There shall be no additional compensation for laying depths up to 7 feet. Bends shall be used at any abrupt changes in direction and lines shall be a minimum distance of 5 feet from any pavement.

1-3.3. TRENCH PREPARATION.

The trench shall be dug to the alignment and grade required and shall be braced and drained for safe, efficient working conditions. Excavation shall not exceed pipe laying at the end of the working period. All pipe line trench excavation shall be considered unclassified and the cost for excavation of any material (earth, sand, gravel, rock, concrete, etc.) shall be borne by the Contractor.

a. Width.

The trench width shall be the nominal diameter of the pipe being laid plus an additional 16 inches. Open cuts across paved surfaces shall be cut in straight, neat lines approximately 12 inches wider than the trench being dug.

b. Bell Holes.

Bell holes shall be provided for properly jointing the pipe and to maintain a 2 inch clearance around the pipe joint.

c. Excavation to Grade.

The trench shall be excavated to provide a uniform and continuous bearing and support for the pipe on solid ground at every point between bell holes. Any excavation below the specified grade shall be corrected with approved material, thoroughly compacted as directed by the Engineer. The finished subgrade shall be prepared accurately by means of hand tools.

d. Unsuitable Foundation.

Where the bottom of the trench at subgrade is found unstable or to include ashes, cinders, refuse, vegetable or other organic materials, or large pieces or fragments of inorganic material that in the judgment of the Engineer should be removed, the Contractor shall excavate and remove such unsuitable material to the width and depth ordered by the Engineer. The subgrade shall then be constructed by backfilling with an approved material, thoroughly compacted in 4 inch layers to provide a uniform and continuous support for the pipe at the specified grade.

e. Clearance in Rock.

Ledge rock, boulders and large stones shall be removed to provide a clearance of at least 6 inches below and on each side of all pipe valves and fittings for pipes 24 inches in diameter or less and 9 inches for pipes larger than 24 inches in diameter. The subgrade shall then be constructed in accordance with Item d above.

1-3.4.

CROSSINGS AND OCCUPANCY.

The Contractor shall comply with all provisions of the permits for any crossings or parallel occupancy.

For a crossing requiring boring and jacking, the Contractor shall be responsible for maintaining line and grade. Where casing is required, a continuous steel casing, with continuous welds, shall be installed by advancing the casing as the hole is being bored. The carrier pipe shall be supported inside of the casing with 18 inch long pressure treated wooden skids which shall be double strapped with No. 10 gauge stainless steel wire or stainless steel straps. The carrier pipe shall not rest on the bells or hubs. Carrier pipe 12 inches and smaller shall be encircled with 4 skids at 90° and carrier pipe from 14 inches to 24 inches shall have 6 skids at 60°. Skid support spacing shall not exceed 4.7 feet for 4 inch pipe; 6.3 feet for 6 inch pipe; 7.4 feet for 8 inch pipe; 8.5 feet for 10 inch pipe; 9.6 feet for 12 inch pipe and 12 feet for 18 inch through 27 inch pipe.

Manufactured plastic skids may be permitted.

Casing end seals shall be installed on all casings and shall be secured to the casing and carrier pipe with stainless steel bands in such a manner as to prevent damage to the seal if

there is any pipe movement. The seals shall be made of oil and water resistant rubber and shall be similar to those manufactured by Maloney Pipeline Products, or equal.

For crossings not requiring casing, the bore shall be made with one continuous section of pipe having no joints under the pavement.

Open cuts shall not be closer than 5 feet from the edge of the pavement on either side or in accordance with the permit.

1-3.5. EXISTING MAINS.

Where there are existing mains along the route of a new main, the existing main and services shall be protected and maintained at the Contractor's expense. If an existing main is to remain in service, it shall not have a "dead end" but shall be connected to form a grid or loop or as directed by the Engineer.

All materials for connections of existing service lines to the new main, after testing and disinfection, must be kept clean and free from all contamination during the changeover. All customers whose water service will be interrupted shall be notified and service shall be restored when possible.

Any main or service line to be abandoned shall be disconnected and capped or plugged at its connections to the live mains. Existing valves, in the abandoned main at its connection to the live main, shall be removed.

1-3.6. TIE-INS TO EXISTING MAINS.

All tie-ins to existing mains must be kept clean and free from all contamination while the cutting-in and connecting are being done. The Contractor shall determine the type of existing pipe at each tie-in location to verify the materials required for the most economical method (for the Owner) of making the tie-in. The method of making the tie-in shall be subject to the Engineer's approval.

The following conditions shall apply to all tie-ins.

- a. If necessary to cut the line out of service, the water operator and all affected customers shall be notified and service shall be restored when possible.
- b. The trench or excavation shall be kept completely dry by providing a sump and by pumping, if necessary.
- c. Excavation around the existing main shall be sufficient to allow thorough cleaning with a wire brush and disinfection with a strong chlorine solution to a point 12 inches either side of the fitting(s) being installed.
- d. The inside of all valves and fittings shall be clean and shall be thoroughly swabbed with a strong chlorine solution before being placed in the existing line.
- e. All connections shall be valved for the new main being installed. This valve shall remain tightly closed until disinfection of the new main has been completed.

1-3.7. PIPE LAYING.

Pipe shall be laid continuously with the bell ends facing in the direction of laying. The trench shall be dewatered and every precaution shall be taken to prevent foreign material from

entering the pipe during installation. All pipe must be perfectly clean before placing in the line.

All phases of installation, including handling, cutting, laying, aligning, and jointing, shall be in strict compliance with the manufacturer's recommendations and with the AWWA Standards.

At times when pipe laying is not in progress, the open ends of pipe shall be sealed by a water-tight plug. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Anchorage and blocking shall be as shown on the Plans.

1-3.8. VALVES AND FITTINGS.

All valves and fittings, not otherwise shown on the Plans, shall be of the slip-joint or mechanical-joint type. Valves shall be set level and the valve box shall be centered over the operating nut and thoroughly tamped in a plumb position. The top surface of the valve box shall be level with the street or slightly above grade when installed in fields or yards.

Existing valves or appurtenances to be abandoned shall be removed from the line.

1-3.9. FIRE HYDRANTS.

All hydrants shall be set plumb and truly vertical with the pumper connection on the street side. Cast-in-place concrete thrust blocks bearing squarely against undisturbed soil shall be placed, using care not to obstruct the hydrant barrel drains. Not less than 7 cubic feet of coarse gravel or crushed stone shall be placed from the bottom of the trench to at least 6 inches above the waste opening and 1 foot around the elbow to facilitate drainage. The hydrant nozzles shall be at least 12 inches above the established grade or ground line.

1-3.10. METER SETTINGS.

All meters shall be set level and the meter box shall be centered over the meter and thoroughly tamped in a plumb position. Five feet of service line, with a cap on the end, shall be stubbed out on the customer side of the meter. The top of the meter box cover shall be slightly above grade to prevent the entrance of surface water. The OWNER shall be notified of the date a meter is installed, the serial number of the meter and the initial meter reading.

1-3.11. HYDROSTATIC TEST.

All distribution and piping systems shall be hydrostatically tested in accordance with Specification 12.

1-3.12. DISINFECTION.

All existing facilities exposed to contamination and all new piping, materials and equipment shall be disinfected in strict conformance with Specification 12 before placing or replacing in service. The Engineer shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

1-3.13. BACKFILLING.

Pipe embedment from the bottom of the trench to the centerline of the pipe shall be with fine earth or sand. It shall be placed by hand on both sides of the pipe simultaneously.

Pipe embedment from the centerline of the pipe to a point 18 inches above the top of the pipe shall consist of finely divided earth or sand free from rocks, boulders or wet or sticky masses. This embedment shall be evenly spread and carefully compacted.

Backfilling to grade under a roadway or other permanent structure shall be with a compacted granular material (sand or DGA) and to the satisfaction of the Engineer. Other backfilling to grade, not shown on the Plans, may be altered to fit the particular situation and tamping may not be required, but the Contractor shall be responsible for all settlement for 1 year.

Identifying/detectable tape shall be laid continuously and directly above the pipe with the printed side up. The tape shall be installed approximately 12 to 18 inches below the ground surface. Tracer wire shall be placed directly above the pipe.

1-3.14. SERVICE LINES.

Service lines shall be connected after the main has been tested, approved, and disinfected. The minimum size service line shall be 3/4 inch and shall be connected to the main with a corporation stop. For PVC and AC main sizes 6 inches and smaller and for cast iron pipe 4 inches and smaller, connections shall be made with a strap service clamp or saddle. For larger size mains, the connection shall be made with a corporation stop having a tapered thread similar to the Mueller H-15000 series or having a rubber sealing sleeve similar to the "Hays-Seal", or equal. For 1 inch and 2 inch service lines, connection to the main shall be made with a double-strap service clamp. Larger service lines or mains shall be connected with a tapping sleeve or by installation of fittings in the main.

The service lines shall be run perpendicular to the main in a straight line to the meter box.

1-3.15. CREEK CROSSINGS.

Creek crossings, where possible, shall be made by gradually increasing the depth of the pipe to provide the specified cover at the lowest point. Crossings requiring the use of bends shall be approved by the Engineer. Payment for crossings shall be at the unit prices bid for the various items used including encasement, as directed.

1-3.16. SPOT EXCAVATION.

Spot excavation shall be a pay item for mobilization, all work and equipment to cover the cost for location of water mains and appurtenances and for excavation to install a valve or other appurtenance at the isolated location (where other work is not being done) as shown on the Plans and as directed by the Engineer.

Spot excavation shall include backfilling in accordance with Article 1-3.13 of this Specification.

The Contractor shall use extreme care to prevent damage to existing mains and appurtenances and the final 6 inches above the main shall be hand excavated. Valve boxes accidentally damaged during spot excavation shall be replaced at the expense of the Owner, but other damage to existing facilities shall be the responsibility of the Contractor.

If a working valve or other item is located, the Contractor shall adjust the valve box height but shall only be paid for spot excavation plus the unit price bid for any new materials used.

Payment for this item shall be at the lump sum bid and excavation at a noncontiguous location shall constitute a separate pay item.

1-3.17.

RECORDS.

The Contractor shall be responsible for maintaining a set of Record Plans showing the size, type of material and location of all new construction and of any existing water facilities located during the work. These Record Plans must always be available to the Engineer and shall be furnished to the Engineer at the end of construction for the Owner's permanent record.

SPECIFICATION 3

CONCRETE WORK

3-1. GENERAL.

This Specification shall include all labor, equipment and materials to complete the concrete work on this project. The Contractor shall supply the Engineer with a certificate for each design mix from the ready mix supplier for approval before ordering.

3-2. MATERIALS.

3-2.1. CONCRETE.

a. General.

Cement for all concrete shall conform with standard specifications for "portland cement", ASTM Designation C-150, Type I.

Fine aggregate shall consist of sand having clean, sound, hard, durable particles and shall be free from clay and organic impurities. The gradation shall be as follows: 100% passing a 3/8 inch sieve; 85-100% passing a No. 4 sieve; 40-80% passing a No. 16 sieve; 5-25% passing a No. 50 sieve; 0-5% passing a No. 100 sieve.

Coarse aggregate shall be crushed stone or washed gravel having hard, strong, durable qualities and shall be free from adherent coatings and laminated, soft or disintegrated pieces. Coarse aggregate for concrete shall be as follows: 100% passing a 1-1/2 inch sieve; 95-100% passing a 1 inch sieve; 25-60% passing a 1/2 inch sieve; 0-10% passing a No. 4 sieve; 0-5% passing a No. 8 sieve.

Water shall be clear, clean and free from injurious substances.

The concrete shall have 6% air plus or minus 1-1/2%. Admixtures containing more than 0.1% shall not be used.

b. Classification.

(1) Structural Concrete.

Structural concrete shall be Class A and is defined as floors, walls, roofs, foundations, footings, etc., having reinforcing steel and requiring form work.

(2) Plain Concrete.

Plain concrete shall be Class B and shall be used only if specified with or without WWF and minor forms.

(3) Encasement Concrete.

Concrete for encasement may be Class C.

c. Strength.

Concrete mixes shall be as follows:

Class A - 3,500 psi in 28 days with 6 bags of cement (minimum).
 Class B - 2,500 psi in 28 days with 5 bags of cement (minimum).
 Class C - 4 bag mix for encasement only (no test required).

d. Consistency.

Concrete shall be proportioned to give a plastic, workable mix meeting the strength requirements by the absolute volume method. Slump tests shall be made in accordance with ASTM Designation C-143. The slump shall not exceed 4 inches for concrete vibrated in place or 5 inches (authorized by Engineer only) for hand consolidation in very thin walls.

3-2.2. REINFORCEMENT.

Bars for concrete reinforcement shall conform with ASTM Designation A-615, Grade 60 (yield strength 60,000 psi) for deformed bars and ASTM Designation A-185 for welded wire fabric (WWF). All reinforcement shall be free from rust, scale, grease or other coatings that might destroy or reduce its bond with the concrete.

3-2.3. JOINT FILLERS.

Preformed fillers shall be furnished in a single piece for the full depth and width required for the joint unless otherwise authorized. When use of more than one piece is authorized for a joint, the abutting ends shall be fastened securely and held accurately to shape.

All joint fillers shall conform with AASHTO Standards and be as approved by the ENGINEER.

3-2.4. JOINT SEALERS.

a. Hot-poured elastic.

Hot-poured elastic joint sealers shall conform with ASTM D 3405 and all applicable Kentucky Transportation Cabinet, Department of Highways Standard Specifications and/or Illinois Department of Transportation Standard Specifications.

b. Preformed Compression Joint Sealers with Lubricant Adhesive.

Preformed compression joint sealers shall be of approved shapes and sizes for the joints to be sealed. The sealers shall conform with ASTM D 2628. The lubricant adhesive shall be compatible with the sealer, concrete, and steel. The sealer manufacturer shall recommend a lubricant adhesive which will be compatible with and which will meet the requirements of ASTM D 2835.

3-3. CONSTRUCTION.

3-3.1. REINFORCEMENT.

The clear distance between parallel bars shall not be less than 1-1/2 times the diameter of the bars. Bars shall have a minimum of 3 inches of concrete covering where concrete is cast directly against the ground; 2 inches of covering where concrete is exposed to earth, water or weathering conditions; and for concrete not exposed to ground or the weather, the reinforcement steel covering shall be not less than 1-1/2 inches for beams, girders, and columns and not less than 3/4 inch for slabs and walls.

Welded wire fabric in slabs shall be placed 1-1/2 inches from the bottom of 4 inch slabs and 2 inches from the bottom of 6 inch slabs.

Splices, where required in the reinforcement steel, shall be Class C in accordance with ACI-318. Chairs, ties, spacers, etc., shall be used to secure reinforcement in place throughout the concreting operation.

3-3.2. EMBEDDED ITEMS.

Sleeves, conduit, bolts, anchors, waterstops, etc., shall be securely anchored in place and thoroughly cleaned before placing the concrete.

3-3.3. FORMS.

Forms shall be secured in place to withstand the placing and the weight of the concrete without bulging, sagging, or deflecting from the line and grade. Forms shall be tight enough to prevent the leakage of mortar, shall be clean from all dirt, debris, etc., and shall be properly coated with a nonstaining mineral form oil for easy removal. Forms shall not be removed until the concrete has sufficient strength, and during removal, care shall be taken so as not to chip corners or damage the concrete.

3-3.4. PLACING CONCRETE.

Concrete may not be placed when the air temperature is 40 degrees F and falling. Concrete placed during hot weather shall be cooled by frequent spraying and protected from curing too rapidly.

Concrete shall be placed within 45 minutes after water has been added. The maximum free-fall in placing concrete shall be 5 feet. A mechanical vibrator shall be used to cause the concrete to flow or settle but care shall be taken to prevent overvibrating and segregation of the aggregate.

Vibrators shall not be used to transport concrete within form work.

3-3.5. JOINTS.

All joints, longitudinal and transverse, shall conform with all details shown on the Plans, and shall be installed at the locations so indicated, or as directed.

Saw-cut joints shall be cut to the depth and width indicated on the Plans and shall be of uniform width throughout. The sawing equipment shall be capable of cutting the joint in strict conformity with the required alignment and depth, and shall be so operated. Transverse saw cuts for joints to be sealed with preformed compression joint seals shall be one continuous cut across the pavement being sawed. Water may be sprayed on the saw blades during the cutting. The joints shall not be sawed until the concrete has hardened to the extent that tearing and raveling will not occur, but as soon thereafter as deemed necessary to preclude random cracking.

All sawed joints shall be thoroughly flushed with clean water or cleaned with compressed air immediately after sawing so the vertical surfaces of the joint will be clean and allow proper adherence of the joint sealer to the surfaces.

All joints shall be protected from intrusion of injurious foreign material until sealed. Temporary seals, when used, shall consist of an acceptable material designed for this use firmly embedded in the joint. The material shall be placed 1/4 inch below the pavement

surface and shall be sufficiently strong and durable to resist intrusion of incompressible materials, and to permit complete removal after its usefulness has ended.

3-3.6. FINISHING.

All exposed concrete surfaces, not otherwise specified, shall have a wood float finish to the lines and grades shown.

Walls, after removal of the forms, shall be rubbed to a reasonable smoothness, eliminating fins, cavities, honeycomb, and other defects on the exposed surfaces. Pointing and rubbing shall be with a mortar of sand and cement and shall be kept moist for 24 hours.

Floors shall have a monolithic, smooth, dense trowel finish.

3-3.7. CURING.

All fresh concrete shall be adequately protected from injurious weather conditions until properly cured. It shall be protected from the sun, heavy rain, flowing water, freezing, or mechanical injury. It shall be kept wet for not less than 7 days and during cold weather shall be maintained at temperatures between 50 degrees F and 70 degrees F for at least 5 days.

3-3.8. TESTING.

Excessive honeycomb, poor alignment, excessive roughness or unevenness, leaking where watertightness is required, or deficient test results may be causes for rejection. The Contractor shall be responsible for collecting, curing and testing of 4 cylinders per 100 cubic yards or part thereof and/or for each separate day's pour all in accordance with generally accepted standards. The Engineer shall be furnished 3 certified copies of all test results.

SPECIFICATION 6

BUILDING AND BUILDING MATERIALS

6-1. SCOPE.

This Specification is a technical description of the materials, equipment, construction systems, the standards and workmanship for WORK applying to the buildings and appurtenances complete and ready for use. The drawings show the characteristics and scope of the WORK to be performed.

All materials and equipment shall be new and unused and workmanship shall be of the highest quality and in accordance with the best standard practice to result in a finished product ready for the use intended.

6-2. CONCRETE BLOCKS.

Concrete blocks shall be of expanded clay or shale aggregate and shall comply with the latest ASTM Specification for Light-Weight Aggregate for Concrete-Masonry Units. Curing, sampling and testing shall also comply with the ASTM Specifications.

- a. Mortar. Mortar for all masonry construction shall be machine mixed for a period of not less than 5 minutes and shall be used within 90 minutes after mixing. Remixing or "tempering" will not be permitted. The mortar shall be either (1) masonry cement and sand or (2) portland cement, hydrated lime and sand. The proportion used shall be in accordance with good practice and acceptable to the ENGINEER.
- b. Workmanship. All masonry construction shall be laid true to dimensions, plumb, square, in bond and properly anchored. All courses shall be level, with joints of a uniform width and dur-o-wal reinforcing shall be used in every other course. Full pargeting shall be done on all backup surfaces between abutting faces of block and brick. Mortar joints shall be full and tight and shall be finished as directed by the ENGINEER. No masonry work shall be permitted during freezing weather or when the air temperature is 40° F.
- c. Cleaning and Painting. After pointing, curing and careful cleaning, the surfaces shall be painted as directed and in accordance with Specification 13.

6-3. TIMBER AND LUMBER.

All lumber shall conform to the latest revision of the American Lumber Standards, Simplified Practice Recommendation, R-16. Grades shall conform to the grading rules of the manufacturer's association under whose rules the lumber is produced. All lumber shall be air-dried and well-seasoned and shall bear the grade and trademark of the applicable association.

- a. Carpentry and Joinery. Only skilled mechanics in their trades shall be employed at all times to handle carpentry and joinery work.

All timber and woodwork shall be properly framed, closely fitted, and accurately set to the required lines and levels, and rigidly secured in place. Joinery shall be true, square, tight-fitting, plumb, level and straight. Nails of the suitable sizes for the various work shall be used and hammer marks left on surfaces of finished materials, as well as cracks

or splits from nailing, will be causes for rejection. Joints and beams shall be set with crown up and lapped joists shall be securely spiked together.

- b. Finishes. All wood surfaces requiring painting or other finishes shall be as directed and in accordance with Specification 13.

6-4. DOORS.

- a. Service Doors. Personnel doors, as shown on the Plans, shall be seamless, insulated, 3'-0" x 7'-0" x 1'-3/4" with 18 gauge panels and shall be furnished with weather-tight head and jamb trim. Hardware shall include 1-1/2 pairs of 4-1/2" x 4-1/2" steel hinges and a stainless steel lock set. The door shall be prime painted with epoxy based primer and oven baked. The finish coat shall match that of the building exterior.

The door frame shall be the knock-down type, 5-3/4" x 2" x 16 gauge mitered steel. Surfaces shall be covered with 1 shop coat of baked-on, zinc chromate primer. Rubber door silencers shall be furnished for strike jambs. Thresholds shall be aluminum with compressible neoprene weather seal.

- b. Keys. Two sets of matched keys shall be furnished for all doors.

6-5. ELECTRICAL.

Electrical work shall be as shown on the Plans and shall comply with Specification 9.

6-6. PAINTS AND PAINTING.

All exposed masonry, woodwork and other building materials shall be painted in compliance with Specification 13.

6-7. VAPOR BARRIER.

Vapor barriers shall be clear or black polyethylene sheets of 4 mil thickness similar to "Visqueen" and shall be located as shown on the Plans. Sheets shall lap a minimum of 12 inches and the Contractor shall use care not to puncture.

6-8. CONCRETE WORK.

Concrete work shall be as shown on the Plans and shall comply with Specification 3.

SPECIFICATION 7TREATMENT BUILDING ADDITION AND MISCELLANEOUS EQUIPMENT

- 7-1. SCOPE. This Specification is a technical description of the materials, equipment, construction systems, the standards and workmanship for work applying to the treatment building addition to house the high service pumps and other miscellaneous equipment complete and ready for use. The drawings show the characteristics and scope of the work to be performed.

The Contractor is referred to Specification 8, "GENERAL EQUIPMENT STIPULATIONS", which complements and/or supplements this Specification.

This work shall include (a) high service pumps and building addition, (b) radio controls, (c) control valves, (d) master meters, and (e) miscellaneous materials, work and equipment.

The Contractor shall coordinate his work with the Inspector and Water Operator to insure that water service will not be interrupted and that water quality will not be harmed. This may require completion of other project facilities (pumping, tank, etc.) before commencing particular work.

- 7-2. PIPING AND VALVES. All water piping, valves and miscellaneous items in plants, pump stations and other structures, shall conform with the applicable AWWA Specification and shall be acceptable for use in potable water systems. All exposed piping shall be protected from freezing with 2 inch fiberglass, moisture-resistant sections of insulation, having 45 lb. weatherproof roofing jacket.
- a. Piping. All piping in structures shall be ductile iron, shall be flanged and shall have a minimum working pressure of 150 psi. Iron pipe shall conform with ANSI A21.51 (AWWA C151) and shall have cement-mortar lining conforming with ANSI A21.4 (AWWA C104).
 - b. Gate Valves. Gate valves larger than 2 inches shall be iron body, bronze mounted, with a nonrising stem complying with AWWA C500 (double-disc) or AWWA C509 (resilient seated). Plant valves, not otherwise shown, shall be wheel operated and all valves shall operate clockwise to close. Valves 2 inches and smaller shall be bronze body.
 - c. Butterfly Valves. Butterfly valves shall conform with AWWA C504 and shall have a minimum working pressure or rating of 150 psi. They shall have semisteel or cast iron bodies with lug connections for use with flanged CIP. The shaft seal shall be hycar and the seat shall be neoprene. They shall have bronze discs, 416 stainless steel shafts and bronze bearings. The actuator shall be of the lever type with 10 position or adjustable memory stops as shown on the Plans. Valves shall close clockwise and open counterclockwise.
 - d. Eccentric Plug Valves. Eccentric plug valves shall be nonlubricated with resilient faced plugs, semi-steel bodies and with ASA 125 pound standard flanges. They shall have a working pressure of 150 psi; shall be lever-operated with an adjustable stop; and shall operate from full closed to full open with one-quarter turn. They shall be as manufactured by DeZurik Corporation, Sartell, Minnesota, or equal.

- e. Check Valves. Check valves, as shown on the Plans, shall have a 150 pound ASA rating. They shall have bronze seats, plugs and bushings and the spring shall be stainless steel. The seats shall be retained with stainless steel screws. Where required, they shall mate to wafer-style butterfly valves without the use of spool pieces or other adapters.
- f. Air Release Valves. Air release valves shall be direct acting or simple lever type for pressures up to 150 psi. They shall have a cast iron body and cover with a stainless steel float and trim. Air release valves shall have a bronze body shut-off valve installed between the main and the air release valve.

7-3. NEW ELEVATED TANK GENERAL. The work under this heading shall include all work at the new elevated tank site not included in the separate bid for the construction of the elevated tank. This work shall have priority for coordination with the Tank Contractor's schedule to have the new elevated tank in service as soon as practical. All work shall be in accordance with the Plans and shall include the following:

- a. Site Work. Complete all site work at the new tank site in accordance with the Plans and Specification 14 which shall include site clearing, grading, drainage and landscaping.
- b. Road, Drives, and Parking. Construct roads, drives and parking areas in accordance with the details shown on the Plans. This shall include topsoil removal, drainage structures, grading, shaping, and base course.
- c. Tank Piping. Complete all of the tank piping as shown on the Plans including connection to the mains, connection to the tank stub-out, valves, fire hydrant, etc. Payment for tank piping shall be at the unit prices bid for the materials used.
- d. Electrical Work. Coordinate work with the power company to provide power to the new site and for all electrical work including the control panel, electrical equipment and buried electrical service to the Tank Contractor's terminal points approximately 5 feet above the ground on the tank columns and/or riser pipe. The Tank Contractor shall be responsible for connection to his equipment provided service is available when he is ready to make his connections. If service is not available for the Tank Contractor, this Contractor shall provide the connections and be responsible for the proper operation.

All work shall be in accordance with the Plans and with Specification 9, "ELECTRICAL AND CONTROL WORK". The cost of all fees and services to the power company shall be borne directly by the Contractor.

- e. Security Fence. Construct a 6 foot chain link fence with a 14 foot, double-swing gate as shown on the Plans and in Specification 14.

7-4. MASTER METERS. The Contractor shall furnish and install 2 master meters and related appurtenances as shown on the Plans.

The master meters shall be located as follows:

- a. Treatment Building. A 4 inch turbine meter shall be installed in the treatment building on the discharge side of the new high service pumps. The meter shall have bronze magnetic drive, flanged ends and shall register in gallons with a sweep hand indicating 1,000 gallons per revolution. The meter shall be Neptune or equal.
- b. Kentucky Highway 121. A 3 inch turbine meter shall be located on Kentucky Highway 121 near Lowes, Kentucky, as shown on the Plans. The meter shall have bronze magnetic drive, flanged ends and shall register in gallons with a sweep hand indicating 1,000 gallons per revolution. The meter shall be Neptune or equal.

7-5. TREATMENT BUILDING ADDITION. The treatment building addition shall be constructed as shown on the Plans and as described in Specification 6. Equipment shall include:

- a. Pumps. Furnish and install 2 new close-coupled, end suction, centrifugal pumps with mechanical shaft seals and motors. The pumps shall be capable of delivering 650 gpm at 106 feet TDH. They shall be Paco Model 4012-7 or equal.

The motors shall be 30 HP and shall operate at 1,750 RPM on 230-460/3/60 current and shall have a 1.15 service factor. They shall be drip-proof, close-coupled, horizontal with ball bearings and shall be nonoverloading at any point on the curve.

- b. Controls. Controls, as shown on the Plans, shall include combination nonfuse disconnect and starter for each pump and an alternator for alternate operation of the 2 pumps and to start the second pump if the first pump fails. Both pumps shall not run at the same time. The starters shall be actuated by a signal from the elevated tank as described under "Radio Controls" herein.
- c. Miscellaneous Equipment. The pressure relief valve with cut-off valves shall be installed as shown on the Plans. The relief valve shall be a 2-1/2 inch, high capacity, internal pilot valve with an adjustable spring loaded diaphragm. It shall have a cast iron body, bronze trim, flanged ends and shall be Ross Valve Manufacturing Company, Inc., Model 23 RWR or equal.

Two elapsed time meters shall be installed at the control panel to totalize the "ON" or running time of each pump. Each meter shall have a synchronous motor to drive a set of digital wheels to indicate the total time each pump is energized. There shall be a minimum of 6 digit wheels which shall record the running time in minutes and tenths of a minute and the unit shall not have a manual reset button.

A pressure gauge shall be installed on the pump suction and a second pressure gauge installed on the pump discharge as shown on the Plans. They shall each have a stop and an air cock. The pressure gauge shall have a 2-1/2 inch dial, brass tube, 1/4 inch NPT connection, brass and stainless steel movement and a range of 0 to 160 psi.

- d. Associated Work. All other work shall be in accordance with the Plans and with the applicable Specifications, including electrical, painting, testing and disinfecting and site work.

7-6. FLOW ON/OFF VALVE. An on/off valve shall be located at the master meter located on Kentucky Highway 121 near Lowes, Kentucky. The valve shall operate on a radio signal from the Lowes pedisphere to open at a low water level and allow the tank to fill.

The valve shall be closed when the solenoid is de-energized and shall be equipped with a manual control for opening the valve in case of power failure.

7-7. RADIO CONTROLS. Operation of the new facilities shall be as follows:

- a. The existing well pumps and chemical feed equipment shall remain in operation and no work shall be required for control of this section of the plant.
- b. The new high service pumps will be activated on a signal from the new 500,000 gallon elevated tank located at the Industrial Park. This shall be accomplished by a radio transmitted signal from the tank for automatic monitoring/recording of the water tank level and automatic control of the high service pumps.
- c. The Lowes pedesphere shall be controlled by the flow on/off valve installed at the Lowes Master Meter. As described above, the valve shall operate on a radio transmitted signal from the Lowes Tank. The tank shall also transmit a signal to the treatment building for monitoring/recording of the Lowes Tank level.

The Contractor shall furnish and install all equipment necessary for a complete solid-state radio telemetry system which will function as specified and shall include the installation of RTU's at the Lowes Tank, the Lowes on/off valve, the Industrial Park 500,000 Gallon Elevated Tank and the high service pumps in the treatment building addition. Radio equipment shall be combined radio/modem units and shall be capable of point to point and point to multipoint communications with repeating capabilities. The Contractor shall pay all fees and obtain all licenses required and shall be responsible for startup and adjustment of the system for proper operation.

The Contractor shall be responsible for all electrical work at each site including permit fees, electrical service as required, entrance poles, meter deposits, enclosures, etc., for a complete system.

All enclosures for radio equipment shall be aluminum Nema 4X having a lockable hinge door, easy open latch and a front mounting interior swing out instrument panel for lights and meters. All panels shall be equipped with selfregulating heaters adequate to prevent condensation. Surge protectors and lightning arresters shall also be provided for all equipment.

Two chart recorders shall be installed in the treatment building addition for recording of the water tank levels. Battery backup with a trickle charge shall be provided for all units along with lightning arresters, circuit protection, antennas, etc.

7-8. FLEXIBLE FITTINGS. Flexible fittings shall have 150 psi working pressures, flanged ends, suitable for use with potable water and shall be installed as shown on the Plans. They shall be by General Rubber Corporation, H062, Uniflex or equal.

7-9. PAINTING. All woodwork, masonry walls, piping and exposed surfaces shall be painted with a prime coat, one intermediate coat and a finish coat. Paint shall be of the highest quality for the particular service and material as recommended by the paint manufacturer. All painting shall be in accordance with Specification 13 and colors not designated in the Specifications shall be selected by the Engineer.

7-10. ELECTRICAL AND CONTROL WORK. All electrical and control work shall comply with Specification 9 and shall be as shown on the Plans.

7-11. CONCRETE WORK. Concrete work shall be as shown on the Plans and shall comply with Specification 3.

SPECIFICATION 8

GENERAL EQUIPMENT STIPULATIONS

8-1. SCOPE.

This specification covers the obligations and responsibilities of the Contractor, his suppliers or vendors and the manufacturers for mechanical and electrical equipment, instruments and devices about this Contract.

8-2. MATERIALS AND WORKMANSHIP.

The materials and equipment furnished under this contract shall be constructed and finished in a workmanlike manner. Materials shall be suitable for the service intended and selected and fabricated following the best engineering practice. All materials and equipment shall be new.

All exposed surfaces of machines shall be finished smooth and shall be painted with a sufficient number of undercoats to provide a smooth, uniform surface. They shall then be finished with a high grade lacquer or spar enamel in an approved and efficient manner. Polished and machined metal surfaces and electrical equipment, not subject to painting, shall be protected from corrosion, moisture, or damage during shipment and erection.

8-3. SOURCE OF EQUIPMENT AND MATERIALS.

Wherever equipment or materials are specified or shown on the plans by using the proprietary product of a particular manufacturer or vendor, it is to establish a standard of quality, operation and appearance. Acceptance or approval of a substitute is only for conformance with the design concept of the project for compliance with the information given in the Contract Documents and does not relieve the Contractor of his responsibility for the satisfactory configuration, operation, use or appearance intended.

8-4. EQUIPMENT TO OPERATE IN STRUCTURES AS DESIGNED.

It is the intent of the Plans, Specifications, and Contract that equipment shall be furnished which can be installed and operated properly in the structures as designed and shown on the Plans. The Owner will assume no responsibility for any alteration in, addition to, enlargement of, or any other change from the shape, size, arrangement and dimensions of any structure as designed and detailed, where such alteration, etc., is required for the installation and proper operation of any alternate equipment. Acceptance of alternate equipment will be contingent on any such alterations, additions, enlargements or other changes being made at the sole cost and expense of the Contractor, which shall be included in his base bid.

8-5. PATENTS AND PATENT ROYALTIES.

All royalties and fees for and in connection with patented articles, devices, apparatus, machines, and other equipment (but not including royalties, fees, or other costs in connection with any patented process required by the Owner in the design of the work or operation thereof) shall be included in the price or prices quoted by the equipment supplier to, and paid by, the Contractor.

8-6. EQUIPMENT GUARANTEE.

Each item of mechanical and electrical equipment, instrument, and device, furnished for and in connection with the contract, shall be guaranteed against (a) faulty or inadequate design by the manufacturer or supplier of such item, (b) improper assembly, (c) defective materials or workmanship, or both, and (d) leakage, breakage, or other failure that might occur, under normal and proper operation of the equipment under specified

conditions, for one year from and after the date of acceptance of the work by the Owner, and each item of equipment or part thereof thus proving defective within the one year guarantee period shall be replaced, without cost to the Owner.

8-7. LUBRICATION.

All bearings and other points of contact of all equipment shall be provided with adequate lubrication and complete lubrication instructions shall be supplied for each piece of equipment. Sufficient lubricants of the proper grade and quality shall be furnished and installed to fill all oil or grease cups, containers, and reservoirs and properly lubricate all equipment for initial startup and operation and until acceptance by the Owner.

8-8. ELECTRICAL EQUIPMENT.

All electrical equipment furnished under these specifications shall be constructed and rated in accordance with the "Standards of AIEE" and shall pass temperature and insulation tests as recommended therein for the operating conditions required. All other electrical work shall conform with Specification 9, "Electrical and Control Work".

8-9. SPECIAL TOOLS AND ACCESSORIES.

With each piece of equipment or machine having parts and requiring periodic repairs and adjustment, there shall be furnished all special tools, wrenches and accessories required for removing worn parts and for making such adjustments. There shall also be furnished all gauges, indicators, lubricating devices, etc., necessary for proper operation of machines whether or not such accessories are specified.

8-10. SATISFACTORY OPERATION.

All mechanical equipment furnished by the Contractor shall operate satisfactorily without excessive wear, excessive lubrication, or undue attention required from its operator. All rotating parts shall be in true rotational balance and operate without vibration caused by mechanical defects or misalignment of parts.

8-11. INSTALLATION AND OPERATION INSTRUCTIONS.

The Contractor shall obtain from the equipment manufacturer, and deliver to the Engineer, not less than nine copies of all necessary shop drawings, instructions and specifications relative to foundation requirements or piping connections, assembly, installation alignment, checking and placing in operation of each item of mechanical and electrical equipment furnished by him. Also, nine copies of all instructions relative to maintenance and operation and drawings and descriptive data necessary for identification of parts for ordering replacements shall be furnished.

8-12. PLACING EQUIPMENT IN SERVICE.

The Contractor shall be responsible for the proper installation, alignment, and operating condition of all equipment and processes furnished. He shall furnish a written statement to the Engineer certifying that the equipment or process furnished (1) has been properly installed, packed and lubricated; (2) is in accurate alignment, secure and free from any undue stress; and (3) has been operated under normal conditions and that its operation is satisfactory and proper.

He shall provide the services of a manufacturer's or supplier's representative who is completely familiar with the operation of the equipment, who shall check over and verify the complete installation, start the equipment in operation, adjust and test all units and instruct the Owner's regular operator in the proper care and operation of said equipment.

SPECIFICATION 9

ELECTRICAL AND CONTROL WORK

9-1. SCOPE.

The work covered by this Specification shall include the furnishing of all labor, materials and equipment and the complete installation for all of the electrical work unless otherwise shown. This work comprises the complete installation and wiring incidental to this project.

The Contractor shall secure all permits, certificates and inspections required to comply with all laws and ordinances of local and State authorities. All fees shall be paid for by the Contractor.

9-2. STANDARDS AND CODES.

The latest published regulations of the National Electrical Code, together with all local rules, regulations, and ordinances relative to electrical work, shall be considered as included in these Specifications and all requirements shall be fully met. All materials shall be fully approved by and shall bear the label of an independent testing laboratory (U.L., F.M., etc.) for the class of service intended.

Where reference is made to the following standards and Code specifications, the latest revision shall be used:

NEMA FOR NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEC FOR NATIONAL ELECTRICAL CODE

9-3. MATERIALS AND WORKMANSHIP.

The materials and equipment supplied shall be new and of the best quality used in commercial practice. Workmanship shall be of the highest grade throughout and in accordance with the best standard practice for the type material used.

The Contractor shall submit to the Engineer, for approval, a complete list of materials and equipment giving the manufacturer's name, catalog and type numbers and shall include drawings showing equipment layout and wiring diagrams. Nine copies of the information shall be submitted.

Equipment specified herein is to indicate quality of product and operating characteristics only, and equal or superior equipment may be submitted for the Engineer's approval.

9-4. RECORDS.

The Contractor shall keep a record, on separate Plans sheets and in the Specifications, to show any changes or deviations required during construction and shall show the final wiring schematic. This set shall be kept at the job site during construction and shall be turned over to the Engineer upon completion of the project to be incorporated in the permanent Record Plans.

9-5. POWER SUPPLY.

Electrical service shall be supplied to the site(s), where shown on the Plans, by the local power company. It shall be the Contractor's responsibility for coordinating his work with the power company and for the costs associated with this work.

The work covered under this specification shall include all work from the point or points where the power company work ends. In general, this shall begin at the weatherhead or at the transclosure and shall include the pad for the transclosure setting.

9-6. CUTTING AND PATCHING.

All cutting, patching and painting shall be done at the Contractor's expense. Cutting of any structural beams or joists shall be approved by the Engineer and all patching shall be done by the various crafts whose work is involved. All cutting shall conform with the requirements of NEC.

9-7. GROUNDING.

All grounding shall be in conformance with Article 250 of the NEC and other applicable portions thereof.

9-8. CONDUIT.

Conduit sizes, supports, connections, bending and protection shall be in accordance with Code requirements.

Exposed conduits shall be installed with runs parallel with or perpendicular to walls or ceilings with right angle turns consisting of bends, outlets or junction boxes.

For installations below grade or where subject to moisture conditions, all conduit fittings, junction boxes, outlet boxes, etc., shall be threaded, moisture-tight type. Covers shall be cast fer alloy with rubber gaskets.

As shown on the Plans, EMT conduit may be used above the slab.

All underground conduit shall be buried to a minimum depth of 2 feet and shall be encased in concrete with a minimum cover of 3 inches on all sides.

9-8.1. Rigid Conduit.

All wiring shall be run in hot-dipped galvanized or sheradized heavy wall (HW) rigid conduit except as otherwise specified herein or on the Plans. Wiring for lighting and control circuits may be run in thin wall (EMT) conduit.

9-8.2. Flexible Conduit.

All motors shall be connected to the conduit system with not less than 24 inches of waterproof flexible conduit and approved fittings. Flexible conduit shall have Code approved grounding.

9-9. CONDUCTORS.

All wire should be soft-drawn, annealed copper wire having a conductivity of not less than 98% of that of pure copper. Each wire must be continuous without weld, splice, or joint throughout its length and must be uniform in cross-section, free from flaws, scales and other imperfections.

All conductors shall be THW stranded. No wire shall be smaller than No. 12 AWG for power or lighting services, except that No. 14 AWG may be used for control circuits. Fixture wire shall be No. 12 AWG with Type AF insulation. The size of the wire for branch lighting circuits shall be the same from the panel board to the last outlet on the circuit. Switch legs shall be No. 12 wire. No wire shall be drawn into a conduit until all work of a nature which may cause injury is completed. Mains and feeders are to be run their entire length in continuous pieces without joints or splices. Joints and splices in conductors shall be made with mechanical or pressure-type splicing devices sized in accordance with the manufacturer's instructions and conforming with the NEC.

9-10. ACCEPTANCE TESTS AND DEMONSTRATIONS.

When electrical and control work is complete and ready for operation, it shall be tested in the presence of the Engineer. The Contractor shall demonstrate all equipment and its operation to the Owner and Engineer and shall furnish the Engineer with 3 copies of all operating and maintenance manuals and a recommended spare parts list.

9-11. LABELING.

The Contractor shall identify all control equipment by use of metal or two-color plastic nameplates permanently fastened in place in plain view of the operator. Equipment such as lighting panel boards shall be provided with a directory properly protected against misplacement or obliteration.

SPECIFICATION 12

TESTING AND DISINFECTING

12-1. SCOPE.

The work under this Specification consists of testing and disinfecting of all water mains and appurtenances, plant equipment, pumping facilities, and storage facilities. Testing and disinfection shall be done by the CONTRACTOR in the presence of the ENGINEER. The cost of testing and disinfecting (including water, chemicals, equipment, etc.) shall be included in the unit and/or lump-sum prices bid. No additional payment shall be made for performance of these items.

12-2. TESTING.

All testing shall be done at the CONTRACTOR'S expense and in accordance with AWWA Standards and manufacturers' recommendations, unless otherwise specified. Any defects in materials or workmanship shall be corrected and retesting shall be at the CONTRACTOR'S expense.

12-2.1. DISTRIBUTION SYSTEM AND APPURTENANCES.

Hydrostatic tests shall be performed on all newly laid pipe and shall consist of a pressure and leakage test. The test shall be run before disinfection and before making service connections. The CONTRACTOR shall furnish the water, pump, piping, meters, connections, and all the necessary apparatus and labor to conduct the test. All pipe shall be tested in accordance with AWWA C600 unless otherwise specified.

Hydrostatic tests shall be performed between all valved and end sections; on shorter sections where practical; and as required to meet the test restrictions contained herein. The test shall be run only after concrete blocking has properly cured (5 days for regular cement and 2 days for high-early strength cement). All fittings, hydrants, plugs, etc., shall be properly blocked and protected.

The testing method described in this section is specific for water pressure testing and is not to be applied for air pressure testing due to the serious safety hazards involved.

a. Test Restrictions.

1. The test pressure, as measured at the point where the highest pressure occurs during normal operation, shall be at least equal to the maximum pressure rating of the pipe.

For systems using different classes of pipe, a separate test shall be run on each section at the respective pressure rating of the pipe being tested. The CONTRACTOR may, at his option and risk, test different sections of pipe simultaneously provided the higher test pressure is used and all other conditions are met.

2. The duration of the test shall be at least 2 hours.
3. The test pressure shall not vary more than 5 psi for the duration of the test.
4. The test pressure shall not exceed the pipe or thrust-restraint design pressures nor be more than twice the rated pressure of the valves or hydrants.

12-3.1. GENERAL.

The general procedure for disinfection is outlined as follows:

- a. The CONTRACTOR shall prevent any contaminating materials from coming into contact with the facilities by utilizing good construction procedure.
- b. The CONTRACTOR shall remove all possible contaminating materials by flushing or other means.
- c. The CONTRACTOR shall chlorinate any residual contamination that may remain and dispose of the chlorinated water.
- d. The CONTRACTOR shall determine the bacteriological quality of the water through certified laboratory testing.

12-3.2. FORMS OF CHLORINE.

The forms of chlorine that may be used in the disinfection process are liquid chlorine, sodium hypochlorite solution, and calcium hypochlorite granules or tablets. The procedure for use and handling of the chlorine shall be in strict compliance with all AWWA and applicable safety standards.

Liquid chlorine contains 100 per cent available chlorine and is produced by mixing chlorine gas with water and injecting the solution into the facilities being disinfected. Direct feed of chlorine gas into the main shall not be permitted.

Sodium hypochlorite is in liquid form and contains approximately 5 to 15 per cent available chlorine. It is fed into the facilities by hand-pouring and mixing with the incoming water or by pumping a solution of known strength into the facilities.

Calcium hypochlorite is in either granular or tablet form and contains approximately 65 per cent available chlorine by weight. It is fed into the facilities by hand-pouring or pumping as described above. One pound of calcium hypochlorite added to 8.5 gallons of water produces a 1 per cent solution.

12-3.3. PREVENTIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION.

It is essential that the facilities are thoroughly clean prior to disinfection and good construction procedures shall be used.

If, in the opinion of the ENGINEER, it appears that all dirt and debris cannot be removed hydraulically, the facilities shall be mechanically cleaned and swabbed with a 1 per cent hypochlorite disinfecting solution.

In cases of pipe contamination by flooding during installation, the main shall be flushed until clean and disinfected so that a 25 mg/l solution is maintained at the end of a 24 hour period. After cleaning and disinfecting, construction may resume.

12-3.4. DISINFECTION OF NEW MAINS.

Two methods of disinfecting mains are offered and the CONTRACTOR shall be responsible for selecting the method best suited for the conditions encountered.

a. Preliminary Flushing.

Preliminary flushing to remove visible evidence of contamination shall be at a rate to produce a velocity of 2.5 fps within the main unless it is determined by the ENGINEER that conditions do not permit the flow. As a guide, Table 12-1 shows the required flow and number of openings to produce a flushing velocity of 2.5 fps in various size mains at 40 psi residual pressure. It shall be the CONTRACTOR'S responsibility to verify the rate required for the actual field conditions.

TABLE 12-1 REQUIRED FLOW AND OPENINGS TO FLUSH PIPELINES* (40 PSI Residual Pressure In Water Main)				
Pipe Diameter Inches	Flow Required To Produce 2.5 fps Velocity in Main GPM	TYPE OF DISCHARGE OUTLET		
		Size of Main,**	Hydrant Outlets	
			Tap On Inches	Number
4	100	0-15/16	1	2-1/2
6	220	1-3/8	1	2-1/2
8	390	1-7/8	1	2-1/2
10	610	2-5/16	1	2-1/2
12	880	2-13/16	1	2-1/2
16	1,565	2-5/8	2	2-1/2

* With a 40 psi pressure in the main with the hydrant flowing to atmosphere, a 2-1/2 inch hydrant outlet will discharge approximately 1,000 GPM. A 4-1/2 inch hydrant outlet will discharge approximately 2,500 GPM.

** Size of tap on main, with no significant length of discharge piping.

b. Methods of Application.

All sections being disinfected shall be properly valved or otherwise disconnected to prevent the strong chlorine solution from entering the mains in active service. All valves and hydrants within the section shall be operated to assure contact with the disinfectant.

Two acceptable methods of application are as follows:

1. Tablet Method.

This method may be used only when the pipes and appurtenances are kept clean and dry during construction and for mains smaller than 24 inches in diameter. It shall not be used on solvent welded plastic or screwed joint steel pipe.

Under this method, hydrostatic tests will be run while disinfection is taking place. If any leaks are detected and the main is either partially or completely drained to make the necessary repairs, the CONTRACTOR shall start the disinfection over using the continuous feed method.

During construction, 5-g calcium hypochlorite tablets shall be placed in each section of pipe and one tablet in each hydrant, hydrant branch and other appurtenances. The number of tablets to place in each pipe section shall be sufficient to produce a concentration of 50 mg/l. As a guide, Table 12-2 is presented. The tablets shall be attached to the inside top of the pipe with an adhesive such as Permatex No. 1 or equal.

Pipe Diameter, Inches	Length Of Pipe Section				
	13 Feet or Less	18 Feet	20 Feet	30 Feet	40 Feet
4	1	1	1	2	2
6	2	2	2	3	4
8	2	3	3	5	6
10	3	5	5	7	9
12	5	6	7	10	14
16	8	12	14	20	26

Preliminary flushing of the main is eliminated for this method. The mains shall be filled as specified herein and chlorinated water shall remain in the main for 24 hours unless the water temperature is less than 41 degrees Fahrenheit, in which case the contact time shall be extended to 48 hours. After the required contact time, and verification of the 25 mg/l residual, final flushing of the main shall take place as specified.

2. Continuous Feed Method.

This method is suitable for general applications. Initial filling, testing and preliminary flushing shall be in accordance with the procedures previously set forth.

The main shall be refilled at a constant measured rate while injecting chlorinated solution into the main at a point no further than 10 feet downstream from the beginning. The chlorine shall be continuously fed into the main at a constant rate such that the water in the main has a concentration of at least 50 mg/l free chlorine. Measurements shall be taken at regular intervals along the new main to assure that this concentration is maintained. The contact time shall be 24 hours and the free chlorine residual at the end of the contact period shall not be less than 25 mg/l as specified. After verification of the residual, final flushing may take place.

Table 12-3 gives the amount of chlorine required to produce 50 mg/l in 100 feet of pipe for the diameters shown.

TABLE 12-3
CHLORINE REQUIRED TO PRODUCE 50 mg/l
CONCENTRATION IN 100 FEET OF PIPE BY DIAMETER

Pipe Diameter Inches	100 Per Cent Chlorine Pounds	1 Per Cent Chlorine Solution Gallons
4	.027	0.33
6	.061	0.73
8	.108	1.30
10	.170	2.04
12	.240	2.88
16	.435	5.20

12-3.5. MISCELLANEOUS DISINFECTION.

All cutting into or repairing of existing mains and all pumps, valves and appurtenances in a treatment plant, coming into contact with a potable water, shall be thoroughly cleaned and then shall be swabbed or sprayed with a 1 per cent hypochlorite solution before installation. Flushing, the most practical means of removing contamination introduced during repairs, shall be started when the repairs are completed and shall be continued until discolored water is eliminated.

12-3.6. DISINFECTION OF STORAGE FACILITIES.

Two methods of disinfecting storage facilities are offered and it shall be the CONTRACTOR'S responsibility to select the method best suited for the conditions.

a. Method 1.

For this method, the storage facility shall be slowly filled to the overflow with potable water to which enough chlorine has been added to provide a concentration of at least 50 mg/l and a residual of 25 mg/l at the end of the 24 hour contact period. The chlorine shall be introduced into the water as early during the filling operation as possible. Approximately 60 pounds of high test hypochlorite will produce 50 mg/l in 100,000 gallons of water.

After verification of the residual, the facility may be flushed as specified herein.

b. Method 2.

For this method, a solution of 250 mg/l available chlorine shall be applied directly to all surfaces of the storage facility that come in contact with the potable water including inlet piping. The solution shall be applied with suitable brushes or spray equipment and the necessary safety precautions shall be taken.

The spraying procedure shall be repeated within 1 hour of completion of the initial spraying. After completion of the second spraying and within 30 minutes of completion, the tank shall be drained and the filling procedure started.

12-3.7. FINAL FLUSHING.

After the specified contact time and after verification of the chlorine residuals, the heavily chlorinated water shall be flushed from the system. Flushing shall be done in a manner to protect the environment and the chlorinated water shall be neutralized with a reducing agent, if necessary. Water remaining in the main or storage facilities shall have a chlorine concentration no higher than that generally prevailing in the system but no less than 1 mg/l.

12-3.8. BACTERIOLOGICAL TESTS.

After final flushing, and before the new main is placed in service, a sample or samples shall be collected from the ends of the lines and tested by an approved laboratory to show the absence of coliform organisms. The results shall conform with the applicable State Standards. State Regulations regarding the method of collecting samples, the number of samples required and any other conditions, more stringent than those specified, shall prevail.

The ENGINEER shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

12-3.9. REDISINFECTION.

If the initial disinfection fails to produce satisfactory results, the facility shall be reflashed and resampled. If the additional samples reveal contamination, the facility shall be drained and rechlorinated. At the CONTRACTOR'S discretion, samples of the water entering the facility may be tested as well.

SPECIFICATION 13

PAINTS AND PAINTING

13-1. SCOPE.

This Specification is a technical description of the materials, equipment, construction systems, standards and workmanship for WORK pertaining to protective coatings and its application. This Specification is applicable for all phases of the WORK, unless otherwise specified.

13-2. GENERAL.

Painting is for protection as well as for appearance, and is of primary importance. Only first class workmanship and materials shall be acceptable and the Contractor shall be responsible for all aspects of painting, including surface preparation, paint systems, application methods, safety, etc. All WORK shall be in accordance with the manufacturer's requirements, applicable standards and State and Federal Regulations.

No painting is required for copper, bronze, aluminum (unless specified), chromium plate, other non-ferrous metals, face brick, glazed facing tile, galvanized fencing, concrete in pump station wet pits, concrete floors (unless specified) and glazing. All other exposed interior and exterior surfaces normally requiring painting shall be painted. All metal surfaces, unless specified, shall have one shop coat.

No separate payment shall be made for compliance with this section and all payment therefor shall be included with other items bid. All materials and workmanship shall be guaranteed for a period of one year from the date of final acceptance.

13-3. MATERIALS.

All paint shall be of the highest quality and shall be the product of one paint manufacturer of known integrity; i.e., Tnemec Company, Inc., Noco, Kop-Coat, Ameron, Rust-Oleum, or equal. The Contractor shall be responsible for the compatibility of all paint systems.

The Contractor shall furnish with the submittal drawings the name of the paint manufacturer to be used; the product information for the particular system selected (mixing instructions, thinning rates, spreading rate, drying time, pot life, safety, etc.); and the application method to be used.

All paint shall be brought to the site in original sealed containers and shall be labeled with the manufacturer's name, distinctive product name or number, and lot number.

Unspecified materials such as shellac, linseed oil, turpentine, or thinners are to be pure and of high quality.

Materials shall be neatly stored in a single place and storage areas shall be maintained clean, and any damage thereto shall be rectified. Oily rags and waste shall be removed every night and precautions shall be taken to avoid fire.

13-4. WORKMANSHIP.

Workmanship shall be first class and all materials shall be evenly spread and flowed on without runs, sags, holidays or excessive brush marks. Only skilled painters shall be employed to do finish work.

All chipped, thin or unpainted places in the prime coat or shop coat shall be spot primed with the same material originally used.

Each coat of paint is to be approximately the same shade as the finish coat, but shall vary slightly to distinguish the difference between coats as they are applied. The Engineer shall witness the application of each coat, otherwise the Contractor shall recoat the work in question without additional cost.

All areas, including those adjacent to the work, shall be protected with drop cloths during progress of the work and shall be cleaned, repainted, etc., as required. Upon completion of the work, all spots and spills shall be removed from floors, glass, equipment, etc.

13-5. PREPARATION OF SURFACES.

All surfaces to be painted shall be dry, smooth and clean.

13-5.1. METAL.

Grease and oil shall be removed with mineral spirits. Remove all dust, rust and mill scale by power wire brushing, chipping or abrasive blasting. All metal surfaces for submerged or intermittently submerged service shall be cleaned only by commercial abrasive blast. Galvanized metal surfaces, unless special purpose paint is used, shall be pickled with a phosphoric or acetic acid solution according to the manufacturer's directions.

13-5.2. WOOD.

Sand all rough and uneven surfaces. Clean residue from all knots, pitch streaks and sappy spots, and touch up with shellac where finish coat is paint or enamel. Putty and smooth all nail holes, cracks, etc., in woodwork after first coat is applied. Color putty to match finish coat.

13-5.3. CONCRETE AND MASONRY.

All concrete and masonry surfaces shall be patched and cleaned of all dust, oil, curing compounds and other foreign matter. Form marks and ribs and excess masonry mortar shall be rubbed to a smooth surface. No painting shall be done until the surface has seasoned. Prior to painting, clean the surfaces to be painted with muratic acid, phosphate or zinc solution, or as recommended by the paint manufacturer and allow to dry, if required.

13-5.4. OLD PAINT AND SEASONED PRIMER.

When painting is required over old paint or seasoned primer, sanding, brushing and chipping shall be done to the satisfaction of the Engineer.

13-6. APPLICATION.

Paint and coating materials shall be applied at the rate and in the manner specified by the manufacturer. If material has thickened or must be diluted for application by a spray gun, the coating shall be built up to the same film thickness achieved with undiluted material. Deficiencies in film thickness shall be corrected by the application of an additional coat of paint. The Contractor shall provide the necessary equipment to test paint thickness to assure compliance and all tests shall be performed in the presence of the Engineer.

No paint shall be applied when the surrounding air temperature is below 50 degrees F or when the temperature of the surface to be painted is below 45 degrees F. Paint shall not be applied to wet or damp surfaces; during rain, snow, fog or mist; or when the relative humidity exceeds 80 per cent. The day's painting shall be completed well in advance of the probable time of day when condensation will occur in order to permit the film an appreciable drying time.

The top and bottom of all doors and other such concealed surfaces shall be adequately covered and proper cure times shall be provided between all coats as recommended by the manufacturer.

13-7. PAINT SYSTEMS.

Unless otherwise specified the following paint systems shall be used:

13-7.1. MASONRY.

Paint systems for masonry block shall be as follows:

- a. Masonry Block (Interior) - One (1) coat of block filler as required to eliminate block patterns and two (2) coats of epoxy.
- b. Masonry Block (Exterior) - Two (2) coats of chlorinated rubber masonry paint.

13-7.2. METAL.

Paint systems for metal surfaces shall generally consist of one shop primer and/or field primer and a compatible 2 or 3 coat finish system suitable for the installation, as follows:

- a. Interior, Nonsubmerged, General Use - Two (2) coats of epoxy ester enamel, 1.4 DFT per coat.
- b. Exterior, Nonsubmerged, General Use - Two (2) coats of alkyd enamel, 1.4 DFT per coat.
- c. Nonsubmerged, High Moisture Areas - Three (3) coats of chlorinated rubber enamel, 1.0 DFT per coat.
- d. Submerged, Large Areas - Two (2) coats of alkyd enamel, 1.4 DFT per coat.
- e. Submerged, and Black in Color - Bituminous as specified below.
- f. Submerged, with Color - Two (2) coats of vinyl enamel, 3.0 DFT per coat.

13-7.3. WOOD.

- a. Wood (Interior) - One (1) undercoat of epoxy ester enamel thinned 20% and two (2) coats of epoxy ester enamel.
- b. Wood (Exterior) - One (1) undercoat of alkyd thinned 20% and two (2) coats of alkyd.

13-8. BITUMINOUS PROTECTIVE COATINGS.

Bituminous protective coatings shall be as manufactured by Kop-Coat, or approved equal and shall be applied as follows:

13-8.1. CONCRETE, BRICK AND MASONRY SURFACES.

Surfaces are to be brushed clean of all dust, dirt and foreign matter. Priming is not required unless material is very porous. Use 2 coats of "Bitumastic Super-Service Black".

13-8.2. STEEL AND FERROUS METAL SURFACES.

Surfaces are to be abrasive blasted to gray metal and have a shop primer of "Bitumastic Mill Undercoat". Field-clean with wire brush any damaged places and apply 1 coat (60 square feet per gallon) of "Bitumastic No. 50". After drying (approximately 72 hours), apply one coat (50 square feet per gallon) of "Bitumastic No. 28 or No. 33".

13-9. COLORS.

The Engineer will select the final colors and shades for the work after submission of color charts and schedules by the Contractor. Samples of the selected colors shall be prepared on 3" square panels of the material to be painted and submitted for the Engineer's approval, if requested. Finished work shall be comparable to the approved samples.

In general, colors shall be in accordance with the following:

WATER AND WASTEWATER PIPING	COLOR
Raw water	Light Green
Treated water	Light Blue
Raw sewage	Dark Green
Sludge	Brown
Potable Water Supply	Light Blue
Gas	Red
Chlorine	Yellow
EQUIPMENT AND BUILDING MATERIALS	COLOR
Heating and ducts	Aluminum
Electrical equipment and conduit	Light Gray
Mechanical equipment, submerged or intermittently submerged	Black
Mechanical equipment, exposed interior and exterior	As Directed
Structural steel, interior and exterior	As Directed
Interior and exterior walls, ceilings floors (if required), trim, fascia, doors, windows, and all miscellaneous materials and equipment	As Directed

SPECIFICATION 14

ASSOCIATED MISCELLANEOUS WORK

14-1. GENERAL.

This Specification covers the furnishing of all labor, materials and equipment for associated miscellaneous work to be incorporated in the project. All materials and equipment shall be new and unused and workmanship shall be of the highest quality and in accordance with the best standard practice to result in a finished product ready for the use intended.

Payment for associated miscellaneous work, unless itemized in the proposal, shall be included in the lump sum or unit price of the particular work item and there shall be no additional payment.

14-2. LANDSCAPING.

This work shall include final grading, seedbed preparation and seeding and/or planting for replacement of areas disturbed during the work and for other sites or areas designated for landscaping. No item of work shall be considered complete until completion of landscaping.

Seeding and planting shall be done during the proper season and moisture conditions established by good horticultural practices to insure the best results. The CONTRACTOR shall be responsible for a good stand of grass and healthy plants for one year.

14-2.1. FINAL GRADING AND SEEDBED PREPARATION.

Final grading shall be to the lines, grades and elevations shown on the Plans. Surface drainage shall be away from any structures and no low spots shall exist.

Six inches of topsoil, free from roots, stones and other objectionable material, suitable for top dressing of a seedbed shall be used in all areas designated for landscaping where gravel, stones, clay and other unsuitable materials exist as determined by the ENGINEER.

After final grading and application of topsoil, if required, the CONTRACTOR shall take soil samples (by the approved method) from all areas of differing soil conditions as directed by the ENGINEER. These samples shall be taken to the local farm bureau for a soil analysis that shall form the basis for lime, nitrogen, phosphoric acid and potash to be used for the particular seeds and/or plantings.

The agricultural lime and fertilizer shall be applied uniformly over the area and the seedbed shall be prepared to a minimum depth of three inches. All clods, rocks, roots and other undesirable material shall be removed. Gentle berms shall be constructed around the various units and all areas shall be dressed by hand to form a satisfactory seedbed as approved by the ENGINEER.

14-2.2. SEEDING AND PLANTING.

Seeding and planting shall be performed immediately after the seedbed has been prepared and seed shall be uniformly distributed over the area to be seeded.

All plants and trees shall be delivered to the site balled or potted, shall have a healthy appearance and shall be guaranteed by the nursery. All seed shall be delivered to the site in sealed bags certified to show the percentage of purity and germination. Lawn replacement of

areas disturbed during the work shall be of the same grass variety as the original lawn. If this cannot be determined, a certified lawn mixture shall be furnished and the application rate of any grass variety shall be as recommended on the container or tag. Any other areas where the seed variety is not specified shall be seeded with Kentucky 31 fescue at the rate of 35 pounds per acre. No seed shall have a test date of more than 120 days before the date of the seeding.

Mulch consisting of wheat or rye straw, or threshed fescue straw, shall be applied uniformly over all seeded areas at the rate of 2 tons per acre. The mulch shall be stabilized (especially on slopes) by stakes and twine; a weighted disk set straight; or any method approved by the ENGINEER.

14-3. ROADWAYS AND BLACKTOPPING.

This work applies to repairing an existing bituminous concrete road or drive or construction of a new bituminous concrete road or drive. This consists of the base course, prime or tack coat and surface course.

14-3.1. SEASONAL AND WEATHER LIMITATIONS.

No bituminous concrete shall be laid between November 15 and April 1, nor when the temperature is below 40 degrees F except by written permission of the ENGINEER, nor when the underlying course is wet, nor when other weather conditions are unsuitable.

14-3.2. BASE COURSE.

The base course shall be 8 inches of compacted bank gravel or 6 inches of compacted dense grade crushed stone. Either base course used shall be approved for highway use. The base course shall be accurately graded to provide adequate drainage both off of and away from the roadbed. New surfaces shall be uniformly crowned at 1/2 inch per foot unless otherwise shown on the Plans. The base course shall be compacted by a roller weighing not less than 3 tons.

14-3.3. REPAIRS TO EXISTING SURFACES.

Where an existing surface is destroyed and repairs are specified, the entire area so disturbed shall be thoroughly cleaned and the base course (specified above) shall be compacted in 4 inch layers to the required depth for making the new surface level with the existing surface.

14-3.4. PRIME COAT.

A prime coat to seal and stabilize the surface of the base shall be liquid asphalt MC-1, liquid asphalt RC-2, or CBAE primer L and shall be applied, as specified, at the rate of 0.3 gallons per square yard.

14-3.5. TACK COAT.

A tack coat, to insure adhesion with an existing surface, shall be RS-2 emulsion and shall be applied at the rate of 0.1 gallon per square yard.

14-3.6. SURFACE COURSE.

The surface course to be used shall be 2 inches of hot-mixed, hot-laid, bituminous concrete with the following composition limits by weight:

Passing 1/2 inch, retained on No. 4 sieve	40 - 55 %
Passing No. 4, retained on No. 10 sieve	15 - 30 %
Passing No. 10 sieve	15 - 30 %
Hydrated lime	0.5 - 1.0%
Asphalt cement (other than liquefier)	5.0 - 7.5%
Liquefier	0.4 - 1.2%

14-4. GENERAL CLEANUP.

Cleanup, as directed by the ENGINEER, shall be maintained throughout the time of construction. Trench settlement and additional earth fill, if required, shall be included in cleanup and shall be the responsibility of the CONTRACTOR for one year after substantial completion.

All areas and locations of the work under this contract shall be left in a neat and clean condition. All debris, scrap, waste and other undesirable and objectionable material shall be completely removed from the site. All areas shall be restored and/or replaced to a condition equal to or better than conditions before construction and to the satisfaction of the property owner.

14-5. CHAIN LINK FENCE.

This article shall govern all material, equipment, labor and construction complete for a chain link fence and gates as shown on the Plans.

14-5.1. POSTS, RAILS AND BRACES.

All structural and roll-formed shapes shall conform with provisions of ASTM A123 for galvanized coating and all tubular members shall comply with provisions for ASTM A120, Schedule 40 steel pipe.

- a. End, corner, pull and gate posts shall be 3 inch O.D. set 3 feet deep in concrete footings with 3 inches of concrete below.
- b. Line posts (10'-0" maximum spacing) shall be 2 inch O.D. and shall be set 3 feet deep in concrete footings with 3 inches of concrete below.
- c. Top rails and gate posts shall be 1-5/8 inch O.D.

14-5.2. CHAIN LINK FABRIC.

The fabric shall be 2 inch mesh, No. 9 gauge, heavy galvanized with 2.0 ounces zinc per square foot complying with ASTM A392, Class 2, or aluminum coated complying with ASTM A491, Class 2. The chain link fabric shall be 6'-0" in height.

14-5.3. ACCESSORIES.

All accessories, except tie wires and barbed wire, shall be galvanized to comply with ASTM A153.

- a. Barbed wire supporting arms shall be integral with post top weather cap, shall have hole for passage of top rail and shall support 3 strands of barbed wire at an angle of 45 degrees.

- b. Barbed wire shall have 2 strand, 12-1/2 gauge wire with No. 14 gauge, 4 point round barbs and shall be galvanized per ASTM A121, Class 3.
- c. Fabric ties shall be No. 9 gauge aluminum wire and shall be spaced at 14 inches o/c on the posts and 24 inches o/c on the rails.

14-5.4. GATES.

Fabricated gates, as shown on the Plans, shall be adequately braced for proper operation and to prevent sagging. Gate hardware shall be heavy galvanized and shall include:

- a. Hinges of pressed steel or malleable iron of the non-lift-off type, offset to permit 180 degrees gate opening.
- b. Latch of the forked type or plunger-bar type with a padlock eye to permit operation from either side of gate.
- c. Keeper for all vehicle gates to engage automatically and hold the gate in the open position until manually released.
- d. Double gates provided with a mushroom-type or flush plate with anchors set in concrete to engage the center drop rod.

14-6. FARM-TYPE FENCE.

The farm-type fence and gate(s) shall be woven wire with barbed wire above and below as shown on the detailed Plans.

14-6.1. FENCE MATERIALS.

- a. Barbed Wire.

Barbed wire shall be 12-1/2 gauge steel and shall comply with ASTM A121 and shall have Class 2 zinc coating.

- b. Woven Wire.

Woven wire shall be general-purpose field wire, closely spaced at the bottom with 10 gauge top and bottom wires and 12-1/2 gauge line and stay wires. It shall be 32 inches in height, have 6 inch spacing between stays and shall contain 8 line wires. It shall have an ASTM A116, Class 1 zinc coating.

- c. Brace & Tension Wire.

Brace and tension wire shall be 9 gauge steel, shall comply with ASTM A121 and shall have a Class 2 zinc coating.

- d. Staples.

Staples shall be 9 gauge, 1-1/2 inches long and shall be zinc coated.

- e. Posts.

Wooden posts shall be new, straight and sound and shall be pressure treated in accordance with Federal Specification TT-W-571c.

Steel posts shall be the studded tee type, galvanized with minimum dimensions of 1-1/2 inches x 1-1/2 inches x 1/8 inch.

All end, corner, brace and gate posts shall be wood, having a minimum diameter of 6 inches and shall be set 3-1/2 feet deep.

Line posts, set 2-1/2 feet deep, shall be either wood with a minimum diameter of 4 inches or steel tee type posts that may be substituted between each fifth wooden post.

f. Wooden Braces.

Wooden braces shall be installed between brace posts and end posts or gate posts and shall be 4 inch x 4 inch pressure treated lumber.

14-6.2. CONSTRUCTION.

Construction of the farm-type fence shall be in accordance with the detailed Plans and wood posts shall be set at all corners, angles, ends and gates with wooden brace posts set as shown on the Plans. All posts shall be set to the required depth in holes large enough to allow room for alignment and tamping on all sides. They shall be set vertically, shall be firmly tamped and the tops shall be beveled at 45 degrees.

Wire shall be fastened to the post outside of the area being enclosed, except in corners or curves, where the wire shall be placed on the outer side of the corner or curve. The wire shall be placed as shown on the Plans with a single strand of barbed wire near the bottom, the 32 inch woven wire in the center and two strands of barbed wire above the woven wire.

The wire shall be attached to the wood posts with staples and to the steel posts with approved fastener clips. Staples and/or fasteners shall allow horizontal movement of the line wire and shall securely support the fence. At end and gate posts, the wire shall be wrapped once around the post and secured by splicing each line wire to itself with no less than six complete turns.

Gates shall be installed at locations shown on the Plans and shall be considered a part of the complete fence.

HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY

RECEIVED

MAR 10 1999

**PUBLIC SERVICE
COMMISSION**

**1998 INDUSTRIAL PARK
WATER SYSTEM IMPROVEMENTS
(500,000 GALLON ELEVATED TANK)**

CONTRACT "B"

**GENERAL CONTRACT DOCUMENTS
AND SPECIFICATIONS**



**APRIL, 1998
(BID OCTOBER, 1998)**

HUNTER MARTIN & ASSOCIATES
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD * PADUCAH, KY. 42003 * (502) 5

EXHIBIT J2

EDA PROJECT NO. AKY 0382

SET NO. 10

**HICKORY WATER DISTRICT
GRAVES COUNTY, KENTUCKY**

**1998 INDUSTRIAL PARK
WATER SYSTEM IMPROVEMENTS
(500,000 GALLON ELEVATED TANK)**

CONTRACT "B"

* * * * *

TABLE OF CONTENTS

TITLE	PAGE NUMBERS
Advertisement for Bids - Contract "B"	AB-1
Information for Bidders - Contract "B"	IB-1 - IB-3
Bid - Contract "B"	B-1 - B-4
Bid Bond - Contract "B"	BB-1 - BB-2
Agreement - Contract "B"	A-1 - A-5
Performance Bond - Contract "B"	PE-1 - PE-3
Payment Bond - Contract "B"	PA-1 - PA-3
Notice of Award - Contract "B"	NA-1
Notice to Proceed - Contract "B"	NP-1
Change Order - Contract "B"	CO-1
General Conditions	GC-1 - GC-15
Supplemental General Conditions	SGC-1 - SGC-38
Special Conditions	SC-1 - SC-7
Wage Determination	SC-8 - SC-31
Technical Specifications:	
11A - Elevated Tank	11A-1 - 11A-24
11B - Water Storage Tank Painting	11B-1 - 11B-6
12 - Testing and Disinfecting	12-1 - 12-7
Plans Sheets (Bound Separately)	Cover - 3

ADVERTISEMENT FOR BIDS- CONTRACT "B"

HICKORY WATER DISTRICT

STATE ROUTE 1241 NORTH

P. O. BOX 128

HICKORY, KY 42051

Separate sealed BIDS for the construction of 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS
(500,000 GALLON ELEVATED TANK) - CONTRACT "B" will be received by

HICKORY WATER DISTRICT at the office of HUNTER MARTIN & ASSOCIATES, INC.,

3220 LONE OAK ROAD, PADUCAH, KY. 42003 until

10:00 A.M., CDT , FRIDAY , OCTOBER 16 , 19 98 , and then at said

office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

HUNTER MARTIN & ASSOCIATES, INC., PADUCAH, KENTUCKY

HICKORY WATER DISTRICT, HICKORY, KENTUCKY

ASSOCIATED GENERAL CONTRACTORS, PADUCAH, KENTUCKY

F. W. DODGE-CIG, EVANSVILLE, INDIANA

TRI-STATE CONSTRUCTION NEWS, EVANSVILLE, INDIANA

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC.,
3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$ 100.00 for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the
payment, and any non-bidder or subbidder upon so returning the CONTRACT DOCUMENTS will be refunded
\$50.00 .

The OWNER reserves the right to waive any informalities or to reject any or all bids.

Each BIDDER must deposit with his BID, security in the amount, form and subject to the conditions provided in the
Information for Bidders.

No BIDDER may withdraw his BID within 90 Days after the actual date of the opening thereof.

SEPTEMBER 17, 1998

DATE

ROBERT H. SULLIVAN, CHAIRMAN

TITLE

INFORMATION FOR BIDDERS - CONTRACT "B"

BIDS will be received by HICKORY WATER DISTRICT (herein called the "OWNER"), at HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KY. 42003 until 10:00 A.M., CDT, FRIDAY, OCTOBER 16, 1998, and then BIDS shall be opened publicly and read aloud.

Each BID must be submitted in a sealed envelope, addressed to the HICKORY WATER DISTRICT, c/o HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KY. 42003. Each sealed envelope containing a BID must be plainly marked on the outside as BID FOR "1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (500,000 GALLON ELEVATED TANK) - CONTRACT "B"" and the envelope shall bear on the outside the BIDDER'S name, address, and license number if applicable, and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to HICKORY WATER DISTRICT, c/o HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KY. 42003.

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required.

The OWNER may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 90 calendar days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

If requested, the OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve the CONTRACTOR from fulfilling any of the conditions of the contract.

Each BID shall be accompanied by a Bid Bond, payable to the OWNER, for 5 percent of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the BONDS of all except the three lowest responsible BIDDERS. When the Agreement is executed, the bonds of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the payment BOND and performance BOND have been executed and approved, after which it will be returned. A certified check may be used in lieu of a Bid Bond.

A PERFORMANCE BOND and a PAYMENT BOND, each in the amount of 100 percent of the CONTRACT PRICE with a corporate surety approved by the OWNER, shall be required for the faithful performance of the CONTRACT.

Attorneys-in-fact who sign BID BONDS, PAYMENT BONDS and PERFORMANCE BONDS must file with each BOND a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance BOND and payment BOND within 10 calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and BOND forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER within 10 calendar days of receipt of acceptable performance BOND, payment BOND and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by WRITTEN NOTICE withdraw the signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within 10 calendar days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the specified period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party. The CONTRACTOR shall commence work within 10 calendar days of receipt of the NOTICE TO PROCEED.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted.

Award will be made to the lowest responsible, responsive BIDDER.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to its BID.

The low bidder shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when required to do so by the OWNER.

The ENGINEER is HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KENTUCKY 42003, (PHONE 502, 554-2737; FAX 502, 554-2738).

An inspection for prospective BIDDERS will leave from the office of HICKORY WATER DISTRICT,
STATE ROUTE 1241, HICKORY, KY. 42051 at 10:00 A.M., CDT , FRIDAY ,
OCTOBER 2 , 19 98 .

BID - CONTRACT "B"

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____

doing business as _____
(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To **HICKORY WATER DISTRICT, STATE ROUTE 1241, P. O. BOX 128, HICKORY, KENTUCKY 42051** (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for the installation of **1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (500,000 GALLON ELEVATED TANK) - CONTRACT "B"** in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 240 consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of \$ 500.00 for each consecutive calendar day thereafter.

BIDDER acknowledges receipt of the following ADDENDUM:

BIDDER, having examined the plans and specifications and being acquainted with and fully understanding (a) the extent and character of the work, (b) the location, arrangement and specified requirements, (c) existing and probable construction difficulties and hazards, (d) local conditions relative to labor, transportation, hauling and delivery, and (e) all other conditions affecting or which may be affected by the PROJECT hereby agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices and/or lump sums:

BID SCHEDULE

NOTE: BIDS SHALL INCLUDE SALES TAX AND ALL APPLICABLE TAXES AND FEES. SEE SPECIAL CONDITIONS FOR EXPLANATION OF BID ITEMS.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
1.	500,000 GALLON ELEVATED TANK				
1.1	Foundation	1	LS		XXXXXX
1.2	Prefabrication	1	LS		XXXXXX
1.3	Erection	1	LS		XXXXXX
1.4	Cathodic Protection	1	LS		XXXXXX
1.5	Painting	1	LS		XXXXXX
	SUBTOTAL NEW ELEVATED TANK			XXXXXX	
2.	ABANDON EXISTING HWY. 121 PEDESPHERE	1	LS		
TOTAL BID - CONTRACT "B"					

NOTE: THE CONTRACT SHALL BE AWARDED BASED ON THE TOTAL BID. HOWEVER, IT IS AGREED THAT THE OWNER MAY ADJUST THE QUANTITIES TO MATCH AVAILABLE FUNDS.

RESPECTFULLY SUBMITTED THIS _____ DAY OF _____, 19 ____ .

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? _____

FIRM NAME

SIGNATURE

FIRM ADDRESS

TITLE

LIST OF PARTNERS, OR CORPORATE OFFICERS WITH TITLES IF APPLICABLE:

PHONE NUMBER

SEAL (IF APPLICABLE)

ATTEST: _____

TITLE

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246 AND 41 CFR PART 60-4)

The following Notice shall be included in, and shall be a part of all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000.

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for minority participation for each trade	Goals for female participation for each trade
------------	---	---

5.2 %

6.9 %

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a) and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of

meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed. The Contractor shall provide written notification to the appropriate Regional Office of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is HICKORY, GRAVES COUNTY, KENTUCKY.

BID BOND - CONTRACT "B"

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned, _____
 _____ as Principal, and
 _____ as Surety, are hereby held and firmly bound
 unto HICKORY WATER DISTRICT
 as Owner in the penal sum of _____
 _____ for the payment of

which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this _____ day of _____, 19 ____ .

The Condition of the above obligation is such that whereas the Principal has submitted to HICKORY WATER DISTRICT a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (500,000 GALLON ELEVATED TANK) - CONTRACT "B"

NOW THEREFORE,

- (a) If said Bid shall be rejected, or
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid.

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal (L.S.)

By: _____

Surety

By: _____

IMPORTANT - Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located, and hold certificates of authority as acceptable sureties (31 CFR 223).

AGREEMENT - CONTRACT "B"

THIS AGREEMENT, made this _____ day of _____, 19_____, by and between

HICKORY WATER DISTRICT, hereinafter called "OWNER" and

_____ doing business as

_____ hereinafter called "CONTRACTOR".

(an individual,) or (a partnership,) or (a corporation)

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the PROJECT described as 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (500,000 GALLON ELEVATED TANK) - CONTRACT "B"
2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the PROJECT described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will complete the same within 240 calendar days unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ _____, or as shown in the BID schedule.

5. The term "CONTRACT DOCUMENTS" means and includes the following:

(A) GENERAL CONTRACT DOCUMENTS

- (1) ADVERTISEMENT FOR BIDS
- (2) INFORMATION FOR BIDDERS
- (3) BID
- (4) BID BOND
- (5) AGREEMENT
- (6) PERFORMANCE BOND
- (7) PAYMENT BOND
- (8) NOTICE OF AWARD
- (9) NOTICE TO PROCEED
- (10) CHANGE ORDER
- (11) GENERAL CONDITIONS
- (12) SPECIAL CONDITIONS

(B) SPECIFICATIONS prepared by HUNTER MARTIN & ASSOCIATES, INC. dated APRIL, 1998 (BID OCTOBER, 1998).

(C) DRAWINGS prepared or issued by HUNTER MARTIN & ASSOCIATES, INC. dated APRIL, 1998 (BID OCTOBER, 1998).

(D) ADDENDA:

No. _____ dated _____ 19 _____

No. _____ dated _____ 19 _____

No. _____ dated _____ 19 _____

- 6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.
- 7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed by their duly authorized officials, this Agreement in FOUR copies each of which shall be deemed an original on the date first above written.

OWNER: HICKORY WATER DISTRICT

BY: _____

NAME: ROBERT H. SULLIVAN
(Please Type)

TITLE: CHAIRMAN

(Seal)

ATTEST:

BY: _____

NAME: _____
(Please Type)

TITLE: _____

CONTRACTOR:

BY:

NAME:

(Please Type)

TITLE:

(Seal)

ATTEST:

BY:

NAME:

(Please Type)

TITLE:

FORM ED-126
(7-69)

U.S. DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION

CERTIFICATE OF GRANTEE/BORROWER'S ATTORNEY

I, the undersigned, _____, the
duly authorized and acting legal representative of _____
_____, do hereby certify as

follows:

I have examined the attached contract(s) and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties there- to acting through their duly authorized representatives; that said repre- sentatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

Date: _____

PERFORMANCE BOND - CONTRACT "B"

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name Of Contractor)

(Address Of Contractor)

a _____ hereinafter called PRINCIPAL and
(Corporation, Partnership or Individual)

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

HICKORY WATER DISTRICT

(Name of Owner)

STATE ROUTE 1241 NORTH, P. O. BOX 128, HICKORY, KY 42051

(Address of Owner)

hereinafter called OWNER in the total aggregate penal sum of _____
_____ Dollars (\$ _____) in lawful money

of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 19____,

a copy of which is hereto attached and made a part hereof for the construction of:

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS

(500,000 GALLON ELEVATED TANK) - CONTRACT "B"

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one year guaranty period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the CONTRACT not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension, or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in FOUR counterparts, each of which shall
Number
be deemed an original, this _____ day of _____ 19 ____.

ATTEST:

Principal

By: _____ (s)

(SEAL)

(Address)

Witness to Principal

Address

ATTEST:

Witness to Surety

Surety

By: _____

(Address)

Attorney-In-Fact

(Address)

NOTE: Date of BOND must not be prior to date of CONTRACT.
If CONTRACT is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

PAYMENT BOND - CONTRACT "B"

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name Of Contractor)

(Address Of Contractor)

a _____ hereinafter called PRINCIPAL and
(Corporation, Partnership or Individual)

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

HICKORY WATER DISTRICT

(Name of Owner)

STATE ROUTE 1241 NORTH, P. O. BOX 128, HICKORY, KY 42051

(Address of Owner)

hereinafter called OWNER and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of _____ Dollars (\$ _____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 19_____, a copy of which is hereto attached and made a part hereof for the construction of:

1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS

(500,000 GALLON ELEVATED TANK) - CONTRACT "B"

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lien holder

whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: the PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer; (b) after the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in FOUR counterparts, each of which shall be deemed an original, this _____ day of _____ 19 ____.

Number

ATTEST:

Principal

By: _____ (s)

(SEAL)

(Address)

Witness to Principal

Address

ATTEST:

Surety

By: _____

Witness to Surety

Attorney-In-Fact

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of CONTRACT.
If CONTRACT is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

NOTICE OF AWARD - CONTRACT "B"

TO: _____

PROJECT DESCRIPTION: 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVE-
MENTS (500,000 GALLON ELEVATED TANK) -
CONTRACT "B"

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated SEPTEMBER 17, 1998, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ _____.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and Certificates of Insurance within 10 calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within 10 days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 19 ____.

HICKORY WATER DISTRICT
OWNER

BY: _____

TITLE: ROBERT H. SULLIVAN, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by _____

_____ this the _____ day of _____, 19 _____.

BY: _____

TITLE: _____

NOTICE TO PROCEED - CONTRACT "B"

TO: _____

DATE: _____

PROJECT: 1998 INDUSTRIAL PARK WATER
SYSTEM IMPROVEMENTS (500,000
GALLON ELEVATED TANK) -
CONTRACT "B"

You are hereby notified to commence work in accordance with the Agreement dated _____, 19 ____,
on or before _____, 19 ____, and you are to complete the WORK within 240 consecutive
calendar days thereafter. The date of completion of all WORK is therefore _____, 19 ____.

HICKORY WATER DISTRICT
OWNER

BY: _____

TITLE: ROBERT H. SULLIVAN, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by _____

this the _____ day of _____, 19 _____.

BY: _____

TITLE: _____

CHANGE ORDER - CONTRACT "B"

ORDER NO.: _____

DATE: _____

AGREEMENT DATE: _____

NAME OF PROJECT: 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS
(500,000 GALLON ELEVATED TANK) - CONTRACT "B"

OWNER: HICKORY WATER DISTRICT

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ _____.

The CONTRACT PRICE due to this CHANGE ORDER will be _____ by:
(Increased / Decreased)
\$ _____.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ _____.

Change to CONTRACT TIME:

The CONTRACT TIME will be _____ by _____ calendar days.
(Increased / Decreased)

The date for completion of all work will be _____.
(Date)

Requested by: _____ OWNER

Recommended by: _____ ENGINEER

Accepted by: _____ CONTRACTOR

GENERAL CONDITIONS

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Definitions 2. Additional Instructions and Detail Drawings 3. Schedules, Reports, and Records 4. Drawings and Specifications 5. Shop Drawings 6. Materials, Services, and Facilities 7. Inspection and Testing 8. Substitutions 9. Patents 10. Surveys, Permits, Regulations 11. Protection of Work, Property, Persons 12. Supervision by Contractor 13. Changes in the Work 14. Changes in Contract Price 15. Time for Completion and Liquidated Damages 16. Correction of Work | <ol style="list-style-type: none"> 17. Subsurface Conditions 18. Suspension of Work, Termination, and Delay 19. Payments to Contractor 20. Acceptance of Final Payment as Release 21. Insurance 22. Contract Security 23. Assignments 24. Indemnification 25. Separate Contracts 26. Subcontracting 27. Engineer's Authority 28. Land and Rights-of-Way 29. Guaranty 30. Arbitration 31. Taxes |
|--|---|

1. DEFINITIONS.

- 1.1. Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated and shall be applicable to both the singular and plural thereof:
- 1.2. **ADDENDA** - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications, or corrections.
- 1.3. **BID** - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4. **BIDDER** - Any person, firm, or corporation submitting a BID for the WORK.
- 1.5. **BONDS** - Bid, Performance, and Payment Bonds and other instruments of surety, furnished by the CONTRACTOR and the CONTRACTOR'S surety in accordance with the CONTRACT DOCUMENTS.
- 1.6. **CHANGE ORDER** - A written order to the CONTRACTOR authorizing an addition, deletion, or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.7. **CONTRACT DOCUMENTS** - The CONTRACT, including Advertisement For BIDS, Information for BIDDERS, BID, BID BOND, AGREEMENT, PAYMENT BOND, PERFORMANCE BOND, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, and ADDENDA.
- 1.8. **CONTRACT PRICE** - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.9. **CONTRACT TIME** - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

- 1.10. DEVELOPER - A corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.11. CONTRACTOR - The person, firm, or corporation with whom the OWNER has executed the Agreement.
- 1.12. DRAWINGS - The parts of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.13. ENGINEER - The person, firm, or corporation named as such in the CONTRACT DOCUMENTS.
- 1.14. FIELD ORDER - A written order affecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.15. NOTICE OF AWARD - The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
- 1.16. NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him/her to proceed with the WORK and establishing the date for commencement of the WORK.
- 1.17. OWNER - A public or quasi-public body or authority, corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.18. PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.19. RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.20. SHOP DRAWINGS - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.21. SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- 1.22. SUBCONTRACTOR - An individual, firm, or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.23. SUBSTANTIAL COMPLETION - That date certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.24. SUPPLEMENTAL GENERAL CONDITIONS - Modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.
- 1.25. SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.

- 1.26. WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.
 - 1.27. WRITTEN NOTICE - Any notice to any party of the AGREEMENT relative to any part of this AGREEMENT in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at their last given address, or delivered in person to said party or their authorized representative on the WORK.
- 2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS.**
- 2.1. The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
 - 2.2. The additional drawings and instructions thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.
- 3. SCHEDULES, REPORTS AND RECORDS.**
- 3.1. The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.

With each succeeding progress payment request, the progress schedule shall be reviewed and revised (if necessary) and shall show the per cent complete of each major feature of the work.
 - 3.2. Prior to the first partial payment estimate, the CONTRACTOR shall submit construction progress schedules showing the order in which the CONTRACTOR proposes to carry on the WORK, including dates at which the various parts of the WORK will be started, estimated date of completion of each part and, as applicable:
 - 3.2.1. The dates at which special detail drawings will be required; and
 - 3.2.2. Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.
 - 3.3. The CONTRACTOR shall also submit a schedule of payments that the CONTRACTOR anticipates will be earned during the course of the WORK.
- 4. DRAWINGS AND SPECIFICATIONS.**
- 4.1. The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.
 - 4.2. In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over general DRAWINGS.
 - 4.3. Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

5. SHOP DRAWINGS.

- 5.1. The CONTRACTOR shall provide SHOP DRAWINGS of all mechanical and electrical equipment and all appearance items. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of any SHOP DRAWING which substantially deviates from the requirement of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.
- 5.2. When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3. Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6. MATERIALS, SERVICES AND FACILITIES.

- 6.1. It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 6.2. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 6.4. Materials, supplies, and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 6.5. Materials, supplies, or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING.

- 7.1. All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 7.2. The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3. The CONTRACTOR shall provide at the CONTRACTOR'S expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 7.4. If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely

notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.

- 7.5. Inspections, tests, or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from the obligation to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6. The ENGINEER and the ENGINEER'S representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records or personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection or testing thereof.
- 7.7. If any WORK is covered contrary to the written instructions of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER'S observation and replaced at the CONTRACTOR'S expense.
- 7.8. If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expense of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, if, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS.

- 8.1. Whenever a material, article, or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue numbers, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS.

- 9.1. The CONTRACTOR shall pay all applicable royalties and license fees, and shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or product of a particular manufacturer or manufacturers is specified; however, if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, the CONTRACTOR shall be responsible for such loss unless the CONTRACTOR promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS.

- 10.1. The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pipe locations and other working points, lines, elevations and cut sheets.
- 10.2. The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, shall be charged with the resulting expense and shall be responsible for any mistake that may be caused by their unnecessary loss or disturbance.
- 10.3. Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, the CONTRACTOR shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY, AND PERSONS.

- 11.1. The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR will take all necessary precautions for the safety of, will provide the necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 11.2. The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. The CONTRACTOR will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. The CONTRACTOR will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone directly or indirectly employed by any of them or anyone of whose acts any of them may be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER, of the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3. In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instructions or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. The CONTRACTOR will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

12. SUPERVISION BY CONTRACTOR.

12.1. The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN THE WORK.

13.1. The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the AGREEMENT. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.

13.2. The ENGINEER also may, at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles the CONTRACTOR to a change in CONTRACT PRICE or TIME, or both, in which event the CONTRACTOR shall give the ENGINEER WRITTEN NOTICE thereof within 7 days after the receipt of the ordered change. Thereafter, the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within 30 days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

14. CHANGES IN CONTRACT PRICE.

14.1. The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:

- a. Unit prices previously approved.
- b. An agreed lump sum.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES.

15.1. The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.

15.2. The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.

15.3. If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4. The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.

15.4.1. To any preference, priority or allocation order duly issued by the OWNER .

15.4.2. To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and

15.4.3. To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. CORRECTION OF WORK.

16.1. The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2. All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within 10 days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUBSURFACE CONDITIONS.

17.1. The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

17.1.1. Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

17.1.2. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

17.2. The OWNER shall promptly investigate the conditions, and if it is found that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless the required WRITTEN NOTICE has been given; provided that the OWNER may, if the OWNER determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

18. SUSPENSION OF WORK, TERMINATION, AND DELAY.

18.1. The OWNER may suspend the WORK or any portion thereof for a period of not more than 90 days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be

allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

- 18.2. If the CONTRACTOR is adjudged bankrupt or insolvent, or makes a general assignment for the benefit of its creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of its property, or if CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or disregards the authority of the ENGINEER or otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and its surety a minimum of 10 days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method the OWNER may deem expedient. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 18.3. Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.4. After 10 days from delivery of WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.
- 18.5. If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than 90 days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within 30 days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within 30 days of its approval and presentation, then the CONTRACTOR may, after 10 days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon 10 days written notice to the OWNER and the ENGINEER stop the WORK until paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.
- 18.6. If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

19. PAYMENT TO CONTRACTOR.

- 19.1. At least 10 days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER as will establish the OWNER'S title to the material and equipment and protect the OWNER'S interest therein, including applicable insurance. The ENGINEER will, within 10 days after receipt of each partial payment estimate, either indicate in writing approval of payment, and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing the reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within 10 days of presentation of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate less the retainage. The retainage shall be an amount equal to 10 percent of said estimate until 50 percent of the work has been completed. At 50 percent completion, further partial payments shall be made in full to the CONTRACTOR and no additional amounts may be retained unless the ENGINEER certifies that the job is not proceeding satisfactorily, but amounts previously retained shall not be paid to the CONTRACTOR. At 50 percent completion or any time thereafter when the progress of the WORK is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10 percent of the value of the work completed. Upon substantial completion of the work, any amount retained may be paid to the CONTRACTOR. When the WORK has been substantially completed except for WORK which cannot be completed because of weather conditions, lack of materials or other reasons which, in the judgment of the OWNER, are valid reasons for noncompletion, the OWNER may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the WORK still to be completed.
- 19.2. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 19.3. Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.4. The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- 19.5. Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within 30 days of completion and acceptance of the WORK.
- 19.6. The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demand of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so, the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from

the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, the CONTRACTOR'S Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

- 19.7. If the OWNER fails to make payment 30 days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE.

- 20.1. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the CONTRACT DOCUMENTS or the PERFORMANCE and PAYMENT BONDS.

21. INSURANCE.

- 21.1. The CONTRACTOR shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of, or result from the CONTRACTOR'S execution of the WORK, whether such execution be by the CONTRACTOR, any SUBCONTRACTOR, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
- 21.1.1. Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
 - 21.1.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees;
 - 21.1.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than employees;
 - 21.1.4. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and
 - 21.1.5. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- 21.2. Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least 15 days prior WRITTEN NOTICE has been given to the OWNER.
- 21.3. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:

21.3.1. CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting the CONTRACTOR from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by the CONTRACTOR or by any SUBCONTRACTOR employed by the CONTRACTOR or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR employed by the CONTRACTOR. Insurance shall be written with a limit of liability of not less than \$500,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$200,000 aggregate for any such damage sustained by two or more persons in any one accident.

21.3.2. The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage Insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

21.4. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the WORK is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of the CONTRACTOR'S employees at the site of the PROJECT and in case any WORK is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide adequate and suitable insurance for the protection of its employees not otherwise protected.

21.5. The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the CONTRACT TIME and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, and the OWNER.

22. CONTRACT SECURITY.

22.1. The CONTRACTOR shall within 10 days after the receipt of the NOTICE OF AWARD furnish the OWNER with a PERFORMANCE BOND and a PAYMENT BOND in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies

accepted on Federal Bonds, CONTRACTOR shall within 10 days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premium on such BOND shall be paid by the CONTRACTOR. No further payment shall be deemed due nor shall be made until the new surety or sureties have furnished an acceptable BOND to the OWNER.

23. ASSIGNMENTS.

- 23.1. Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of any right, title or interest therein, or any obligations thereunder, without written consent of the other party.

24. INDEMNIFICATION.

- 24.1. The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.
- 24.2. In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.
- 24.3. The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, its agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

25. SEPARATE CONTRACTS.

- 25.1. The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate the WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.
- 25.2. The OWNER may perform additional WORK related to the PROJECT or the OWNER may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if the OWNER is performing the additional WORK) reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate the WORK with theirs.
- 25.3. If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others

involves it in additional expense or entitles it to an extension of the CONTRACT TIME, the CONTRACTOR may make a claim thereof as provided in Sections 14 and 15.

26. SUBCONTRACTING.

- 26.1. The CONTRACTOR may utilize the services of specialty SUBCONTRACTS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- 26.2. The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of 50 percent of the CONTRACT PRICE, without prior written approval of the OWNER.
- 26.3. The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of its SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as the CONTRACTOR is for the acts and omissions of persons directly employed by the CONTRACTOR.
- 26.4. The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 26.5. Nothing contained in this CONTRACT shall create any contractual relationship between any SUBCONTRACTOR and the OWNER.

27. ENGINEER'S AUTHORITY.

- 27.1. The ENGINEER shall act as the OWNER'S representative during the construction period, shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed, and shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 27.2. The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship, and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
- 27.3. The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
- 27.4. The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

28. LAND AND RIGHTS-OF-WAY.

- 28.1. Prior to issuance of the NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
- 28.2. The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
- 28.3. The CONTRACTOR shall provide at its own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

29. GUARANTEE.

29.1. The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of 1 year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of 1 year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The PERFORMANCE BOND shall remain in full force and effect through the guarantee period.

30. ARBITRATION BY MUTUAL AGREEMENT.

30.1. All claims, disputes, and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by making an acceptance of final payment as provided by Section 20, may be decided by arbitration if the parties mutually agree. Any agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.

30.2. Notice of the request for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and a copy shall be filed with the ENGINEER. Request for arbitration shall in no event be made on any claim, dispute, or other matter in question which would be barred by the applicable statute of limitations.

30.3. The CONTRACTOR will carry on the WORK and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

31. TAXES.

31.1. The CONTRACTOR will pay all sales, consumer, use, and other similar taxes required by the laws of the place where the WORK is performed.

SUPPLEMENTAL GENERAL CONDITIONS

- S1 Definitions
- S2 Federally Required Contract Provisions
- S3 Required Provisions Deemed Inserted
- S4 Inspection by EDA Representatives
- S5 Construction Schedule and Periodic Estimates
- S6 Contractor's Title to Material
- S7 Inspection and Testing of Materials
- S8 "Or Equal" Clause
- S9 Patents
- S10 Claims for Extra Cost
- S11 Contractor's and Subcontractor's Insurance
- S12 Contract Security
- S13 Safety and Health Regulations for Construction
- S14 Minimum Wages
- S15 Withholding of Payments
- S16 Payrolls and Basic Records
- S17 Apprentices and Trainees
- S18 Subcontracts
- S19 Termination and Debarment
- S20 Overtime Requirements
- S21 Equal Employment Opportunity
- S22 Other Prohibited Interests
- S23 Employment of Local Labor
- S24 Historical and Archeological Data Preservation Act of 1974
- S25 Clean Air and Federal Water Pollution Control Act
- S26 Use of Lead-Based Paints on Residential Structures
- S27 Signs

SUPPLEMENTAL GENERAL CONDITIONS

S-1 DEFINITIONS

The following terms as used in these Supplemental General Conditions are respectively defined as follows:

- a. "Contractor": A person, firm, or corporation with whom this Contract is made by the Owner.
- b. "Subcontractor": A person, firm, or corporation supplying labor and materials or only labor, for work at the site of the project, for and under separate contract or agreement with the Contractor.
- c. "Work on (at) the project": Work to be performed at the location of the project, including the transportation of materials and supplies to or from the location of the project by employees of the Contractor and any subcontractor.
- d. "Apprentice": (1) A person employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau; or (2) a person in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship council (where appropriate) to be eligible for probationary employment as an apprentice.
- e. "Trainee": A person receiving on-the-job training in a construction occupation under a program which is approved (but not necessarily sponsored) by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, and which is reviewed from time to time by the Manpower Administration to insure that the training meets adequate standards.

S-2 FEDERALLY REQUIRED CONTRACT PROVISIONS

- a. Administrative, contractual, or legal remedies in instances where

contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate (Contracts more than the simplified acquisition threshold).

- b. Termination for cause and for convenience by the grantee including the manner by which it will be effected and the basis for settlement (All contracts in excess of \$10,000).
- c. Compliance with Executive Order 11246 of September 24, 1965 entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967 and as supplemented in Department of Labor regulations (41 CFR Chapter 60) (All construction contracts awarded in excess of \$10,000 by grantees and their contractors or subgrantees).
- d. Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3) (All contracts and subgrants for construction or repair).
- e. Compliance with the Davis-Bacon Act (40 U.S.C. 276a to a-7) as supplemented by Department of Labor regulations (29 CFR Part 5) (Construction contracts in excess of \$ 2,000 awarded by grantees and subgrantees).
- f. Compliance with sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5). (Construction contracts awarded by grantees and subgrantees in excess of \$ 2,000, and in excess of \$ 2,500 for other contracts which involve the employment of mechanics or laborers)
- g. EDA requirements and regulations pertaining to reporting.
- h. EDA requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.
- i. EDA requirements and regulations pertaining to copyrights and rights in data.
- j. Access by the grantee, EDA, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.

- k. Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.
- l. Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clear Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15) (Contracts, subcontracts, and subgrants of amounts in excess of \$ 100,000).
- m. Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub L. 94-163, 89 Stat. 871)

S-3 REQUIRED PROVISIONS DEEMED INSERTED

- a. Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion of correction.

S-4 INSPECTION BY ECONOMIC DEVELOPMENT REPRESENTATIVES

The authorized representatives and agents of the Economic Development Administration shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials and other relevant data and records.

S-5 CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor also shall furnish the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making

partial payments thereon. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

S-6 CONTRACTOR'S TITLE TO MATERIAL

No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he/she has good title to all materials and supplies used by him/her in the work, free from all liens, claims or encumbrances.

S-7 INSPECTION AND TESTING OF MATERIALS

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. The Owner shall pay for all laboratory inspection service directly, and not as part of the contract.

Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for intended users.

S-8 "OR EQUAL" CLAUSE

Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, tradenames, catalogue numbers, etc., it is intended merely to establish a standard; and, any material, article or equipment of other manufacturers and vendors which will perform adequately the duties, imposed by the general design will be considered equally acceptable provided the material, article or equipment so proposed is, in the opinion of the Architect/Engineer, of equal substance and function. It shall not be purchased or installed by the Contractor without the Architect/Engineer's written approval.

S-9 PATENTS

The Contractor shall hold and save the owner and its officers, agents, servants and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the contract documents.

License or Royalty Fee: License and/or royalty fees for the use of a process which is authorized by the Owner of the project must be reasonable, and paid to the holder of the patent, or his authorized licensee, directly by the Owner and not by or through the Contractor. If the Contractor uses any design, device or materials covered by letters, patent or copyright, he/she shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, device or material. It is mutually agreed and understood that, without exception, the contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his/her Sureties shall indemnify and hold harmless the Owner of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract, and shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

S-10 CLAIMS FOR EXTRA COSTS

No claims for extra work or cost shall be allowed unless the same was done in pursuance of a written order from the Architect/Engineer approved by the Owner.

S-11 CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

The Contractor shall not commence work under this contract until he/she has obtained all the insurance required by the Owner, nor shall the Contractor allow any subcontractor to commence work on his/her subcontract until the insurance required of the subcontractor has been so obtained and approved.

a. Types of insurance normally required are:

1. Workmen's Compensation
 2. Contractor's Public Liability and Property Damage
 3. Contractor's Vehicle Liability
 4. Subcontractors Public Liability, Property Damage and Vehicle Liability
 5. Builder's Risk (Fire and Extended Coverage)
- b. Scope of Insurance and Special Hazards. The insurance described above shall provide adequate protection for the Contractor and his/her claims which may arise from operations under this contract, whether such operations be by the insured or by any one directly or indirectly employed by him/her and also against any of the special hazards which may be encountered in the performance of this contract.
- c. Proof of Carriage of Insurance The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies.

S-12 CONTRACT SECURITY BONDS

If this contract is for an amount in excess of \$100,000 the Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the contract price is security for the faithful performance of this contract and also a payment bond in an amount equal to one hundred percent (100%) of the contract price or in a penal sum not less than that prescribed by State, Territorial or local law, as security for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law. Before final acceptance each bond must be approved by the Economic Development Administration. If this contract is for an amount less than \$100,000 the Owner will specify the amount of the payment and performance bonds.

S-13 SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

In order to protect the lives and health of his/her employees under the contract, the Contractor shall comply with all pertinent provisions of the Contract Work Hours and Safety Standards Act, as amended, commonly known as the Construction Safety Act as pertains to health and safety standards; and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the contract. Section 107 of

the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction, safety and health standards promulgated by the Secretary of Labor.

The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his/her plan, equipment, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operation.

S-14 MINIMUM WAGES

All mechanics and laborers employed or working on the site of the work, or under the United States Housing Act of 1937, or under the Housing Act of 1949 in the construction or development of the project will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amounts due at time of payment computed at wage rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and subcontractor and such laborers and mechanics; and the wage determination decision shall be posted by the Contractor at the site of the work in a prominent place where it can be easily seen by the workers. For the purpose of this clause, contributions made or costs reasonably anticipated under Section 1 (b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5 (a) (1)(iv).

Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

The Owner shall require that any class of laborers and mechanics, including apprentices and trainees, which is not listed in the wage determination and which is to be employed under the contract, shall be classified or reclassified conformable to the wage determination and a report of the action taken shall be sent by the Federal agency to the Secretary of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular

class of laborers and mechanics, including apprentices and trainees, to be used, the questions accompanied by the recommendation of the contracting officer shall be referred to the Secretary of Labor for final determination.

Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the Contractor is obligated to pay a cash equivalent of such a fringe benefit, the Owner shall require an hourly cash equivalent to be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question, accompanied by the recommendation of the Owner, shall be referred to the Secretary of Labor for determination.

If the Contractor does not make payments to a trustee or other third person, he/she may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor which is a part of this contract; provided, however, the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

S-15 WITHHOLDING OF PAYMENTS

The Economic Development Administration may withhold or cause to be withheld from the Contractor as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices and trainees, employed by the Contractor or any subcontractor on the work, the full amount of wages required by the contract in accordance with the Davis-Bacon Act. In the event of failure to pay any laborer or mechanic, including any apprentice or trainee employed or working on the project site or under the United States Housing Act of 1937 or under the Housing Act of 1949, in the construction or development of the project, all or part of the wages required by the contract, the Economic Development Administration may, after written notice to the Contractor, sponsor, applicant, or Owner, take action as may be necessary to cause the suspension of any further payment, advance, or guaranty of funds until such violations have ceased.

S-16 PAYROLLS AND BASIC RECORDS

Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the EDA project site, or under the United States Housing Act of 1937 or under the Housing Act of 1949, in the construction or development of the project. Such records shall contain the name and address of each employee, his/her correct classification, rate of pay (including contributions or costs anticipated of the types described in Section 9 (b) (2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a) (1) (iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan program described in Section 1 (b) (2) (B) of the Davis-Bacon Act the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, plus records which show the costs anticipated or the actual cost incurred in providing such benefits.

The Contractor shall submit weekly a copy of all payrolls to the Owner on DOL Form WH-347 or equivalent. The copy shall be signed on the reverse side by the employer or his/her agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor and that the classifications set forth for each laborer or mechanic conform with the work he/she performed. This submission is required under this contract and the Copeland regulations of the Secretary of Labor (29 CFR Part 3) and the filing with the initial payroll or any subsequent payroll of a copy of any findings by the Secretary of Labor under 20 CFR 5.5 (a) (1) (iv) shall satisfy this requirement. The Prime Contractor shall be responsible for the submission of copies of payrolls of all subcontractors. The Contractor shall make the records required under the labor standards clause of the contract available for inspection by authorized representatives of the Economic Development Administration and the Department of Labor, and shall permit such representatives to interview employees during working hours on the job.

S-17 APPRENTICES AND TRAINEES

Apprentices will be permitted to work as such only when they are registered, individually, under a bona fide apprenticeship program registered with a State apprenticeship agency which is recognized by the Bureau of Apprenticeship and Training, U. S. Department of Labor; or, if no such recognized agency exists in

a State, under a program registered with the Bureau of Apprenticeship and Training, U. S. Department of Labor. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the Contractor as to his/her entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not a trainee as defined in Section S-1e herein and is not registered as above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or subcontractor shall be required to furnish to the Owner written evidence of the registration of his/her program and apprentices as well as of the appropriate ratios and wage rates for the area of construction prior to using any apprentices on the contract work.

Trainees will be permitted to work as such when they are bona fide trainees employed pursuant to a program approved by the U. S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, and when the subparagraph below is applicable, in accordance with the provisions of Part 5, Subpart A, Title 29, Code of Federal Regulations.

On contracts in excess of \$10,000, the employment of all laborers and mechanics, including apprentices and trainees, as defined in Section 29 CFR 5.5 shall also be subject to the provisions of Part 5, Subpart A, Title 29, Code of Federal Regulations. Apprentices and trainees shall be hired in accordance with the requirements of Part 5, Subpart A. The provisions of Sections S-14, S-15, and S-17 shall be applicable to every invitation for bids, and to every negotiation, request for proposals, or request for quotations, for an assisted construction contract, and to every such contract entered into on the basis of such invitation or negotiation. Part 5, Subpart A, Title 29, Code of Federal Regulations shall constitute the conditions of each assisted contract in excess of \$10,000, and each Owner concerned shall include these conditions or provide for their inclusion, in each such contract. These "Supplemental General Conditions" shall also be included in each such contract.

S-18 SUBCONTRACTS

The Contractor shall insert in any subcontracts these same "Supplemental General Conditions."

S-19 TERMINATION AND DEBARMENT

A breach of any one of the Sections S-15 through S-18 may be considered by the Owner and by the Economic Development Administration as grounds for

termination of the contract and for debarment as provided in 29 CFR 5.6.

S-20 OVERTIME REQUIREMENTS

No Contractor nor any subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he/she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his/her basic rate of pay for all hours in excess of forty hours in such workweek.

In the event of any violation of the clause set forth in the subsection above, the Contractor and any subcontractor responsible therefor, shall be liable to any affected employee for his/her unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or territory, to such District of Columbia or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the clause set forth above in the sum of \$10.00 for each calendar day on which such employee was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth above.

The Economic Development Administration may withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth above.

The Contractor shall insert in all subcontracts the clause set forth above in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts that may, in turn, be made.

S-21 EQUAL EMPLOYMENT OPPORTUNITY

No person in the United States shall, on the grounds of race, color, national origin, age, physical handicap, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance; Reference Title VI of the Civil Rights Act

of 1964 (42 USC 2000d) and Section 112 of Public Law 92-65, Age Discrimination Act of 1975 (42 USC 6102) and Section 504 of the Rehabilitation Act of 1973 (26 USC 794).

Form ED-503 The Owner and all Contractors, subcontractors, suppliers, leases and other parties directly participating in the Recipient's project agree that during and in connection with the associated agreement relating to the Federally assisted program, (i) they will comply, to the extent applicable, as Contractors, subcontractors, lessees, suppliers, or in any other capacity, with the applicable provisions of 13 CFR 311 and the Regulations of the United States Department of Commerce (Part 8 of Subtitle A of Title 15 of the Code of Federal Regulations) issued pursuant to Title VI of the Civil Rights Act of 1964 (P. L. 88-352), and will not thereby discriminate against any person on the grounds of race, sex, color, age, or national origin in their employment practices, in any of their own contractual agreements, in all services or accommodations which they offer to the public, and in any of their other business operations, (ii) they will provide information required by or pursuant to said Regulations to ascertain compliance with the Regulations and these assurances, and (iii) their non-compliance with the nondiscrimination requirements of said Regulations and these assurances shall constitute a breach of their contractual arrangements with the Owner whereby said agreements may be canceled, terminated or suspended in whole or in part or may be subject to enforcement otherwise by appropriate legal proceedings.

Executive Order 11246, 3 CFR 339 (1965) (Equal Opportunity Clause). During the performance of this contract, the Contractor agrees as follows:

- a. The Contractor shall not discriminate against any employee or applicant for employment because of age, race, color, religion, sex, handicap, or national origin. The Contractor shall take affirmative action to ensure the applicants are employed, and that employees are treated during employment, without regard to their age, race, color, religion, sex, handicap or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- b. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided by the Grantee setting forth the provisions of this nondiscrimination clause.
- c. The Contractor shall, in all solicitations or advertisements for employees

placed by or on behalf of the Contractor, state that all qualified applicants shall receive consideration for employment without regard to race, color, religion, sex, or national origin.

- d. A notice to be provided by the Grantee shall be sent to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract of understanding, advertising the labor union or workers' representative of the Contractor's commitment under Section 202 of Executive Order No. 11246 of September 24, 1965, and copies of the notice shall be posted in conspicuous places available to employees and applicants for employment.
- e. The Contractor shall comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of rules, regulations, and relevant orders of the Secretary of Labor.
- f. The Contractor shall furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the Economic Development Administration and the Secretary of Labor for purpose of investigation to ascertain compliance with such rules, regulations, and orders. Each Contractor and subcontractor of federally assisted construction work is required to file an Equal Employment Opportunity Employer Information Report (EEO-1) on Standard Form 100, annually on March 31. Forms and instructions are available at the EDA Regional Offices.
- g. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed (and remedies involved) as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- h. The Contractor shall include the provisions of paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 203 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The

Contractor shall take such action with respect to any subcontractor or purchase order as the Economic Development Administration may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the Grantee/Borrower, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

i. Exemptions to Above Equal Opportunity Clause (41 CFR Chap. 60):

- (1) Contracts and subcontracts not exceeding \$10,000 (other than Government bills of lading) are exempt. The amount of the contract, rather than the amount of the Federal financial assistance, shall govern in determining the applicability of this exemption.
- (2) Except in the case of subcontractors for the performance of construction work at the site of construction, the clause shall not be required to be inserted in subcontracts below the second tier.
- (3) Contracts and subcontracts not exceeding \$10,000 for standard commercial supplies or raw materials are exempt.

STANDARD FEDERAL EQUAL EMPLOYMENT
OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246 et seq)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan

approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to make good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in Paragraphs 7a through p of these specifications. The goals set for the Contractor in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation,

and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all superintendents and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority and female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Regional Director when the union or unions, with which the Contractor has a collective bargaining agreement, have not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under Paragraph 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all

management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, Supervisors, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, and providing written notification to, and discussing the Contractor's EEO policy with, other Contractors and subcontractors with whom the Contractor anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after-school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 14 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually

monitoring all personnel and employment-related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (Paragraph 7a through p). The efforts of a contractor association, joint contractor-union, contractor community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Paragraph 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof, as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application or requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).
16. The goals for minority and female participation in each trade will be furnished by

the Economic Development Administration of the U. S. Department of
Commerce.

S-22 OTHER PROHIBITED INTERESTS

No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer, or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

S-23 EMPLOYMENT OF LOCAL LABOR

- a. The maximum feasible employment of local labor shall be made in the construction of public works and development facility projects receiving direct Federal grants. Accordingly, every Contractor and subcontractor undertaking to do work on any such project which is or reasonably may be done as on-site work, shall employ, in carrying out such contract work, qualified persons who regularly reside in the designated area where such project is to be located, or in the case of Economic Development Centers, qualified persons who regularly reside in the center or in the adjacent or nearby redevelopment areas within the Economic Development District, except:
 - (1) To the extent that qualified persons regularly residing in the designated area or Economic Development District are not available.
 - (2) For the reasonable needs of any such Contractor or subcontractor, to employ supervisory or specially experienced individuals necessary to assure an efficient execution of the Contract.
 - (3) For the obligation of any such Contractor or subcontractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that in no event shall the number of non-resident persons employed under this subparagraph exceed twenty percent of the total number of employees employed by such Contractor and his/her subcontractors on such project.
- b. Every such Contractor and subcontractor shall furnish the United States

Employment Service Office in the area in which a public works or development facility project is located with a list of all positions for which it may from time to time require laborers, mechanics, and other employees, the estimated numbers of employees required in each classification, and the estimated dates on which such employees will be required.

- c. The Contractor shall give full consideration to all qualified job applicants referred by the local employment service, but it is not required to employ any job applicants referred whom the Contractor does not consider qualified to perform the classification of work required.
- d. The payrolls maintained by the Contractor shall contain the following information: full name, address, and social security number and a notation indicating whether the employee does, or does not, normally reside in the area in which the project is located, or in the case of an Economic Development Center, in such center or in an adjacent or nearby redevelopment area within the Economic Development District, as well as an indication of the ethnic background of each worker.
- e. The Contractor shall include the provisions of this condition in every subcontract for work which is, or reasonably may be, done as on-site work.

S-24 HISTORICAL AND ARCHAEOLOGICAL DATA PRESERVATION ACT REQUIREMENTS

The Contractor agrees to facilitate the preservation and enhancement of structures and objects of historical, architectural or archaeological significance and when such items are found and/or unearthed during the course of project construction, to consult with the State Historic Preservation Officer for recovery of the items. Reference: National Historic Preservation Act of 1966 (80 Stat 915, 16 USC 470) and Executive Order No. 11593 of May 31, 1971.

S-25 CLEAN AIR ACT OF 1970, ET SEQ. AND FEDERAL WATER POLLUTION CONTROL ACT AS AMENDED BY THE CLEAN WATER ACT OF 1977

The Contractor agrees to comply with Federal clean air and water standards during the performance of this contract and specifically agrees to the following:

- a. The term "facility" means any building, plant, installation, structure, mine, vessel or other floating craft, location or site of operations; owned, leased, or supervised; by the Contractor and the subcontractors; for the construction,

supply and service contracts entered into by the Contractor;

- b. Any facility to be utilized in the accomplishment of this contract is not listed on the Environmental Protection Agency's List of Violating Facilities pursuant to 40 CFR, Part 15.20;
- c. In the event a facility utilized in the accomplishment of this contract becomes listed on the EPA list, this contract may be cancelled, terminated, or suspended in whole or in part;
- d. It will comply with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Water Pollution Control Act relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308, respectively, and all regulations and guidelines issued thereunder;
- e. It will promptly notify the Government of the receipt of any notice from the Director, Office of Federal Activities, Environmental Protection Agency, indicating that any facility utilized or to be utilized in the accomplishment of this contract is under consideration for listing on the EPA List of Violating Facilities;
- f. It will include the provisions of Paragraphs a. through g. in every subcontract or purchase order entered into for the purpose of accomplishing this contract, unless otherwise exempted pursuant to the EPA regulations implementing the Air or Water Acts above (40 CFR, Part 15.5), so that such provisions will be binding on each subcontractor or vendor;
- g. In the event that the Contractor or the subcontractor for the construction, supply and service contracts entered into for the purpose of accomplishing this contract were exempted from complying with the above requirements under the provisions of 40 CFR, Part 15.5 (a), the exemption shall be nullified should the facility give rise to a criminal conviction (see 40 CFR 15.20) during the accomplishment of this contract. Furthermore, with the nullification of the exemption, the above requirements shall be effective. The Contractor shall notify the Government, as soon as the Contractors' or the subcontractors' facility is listed for having given rise to a criminal conviction noted in 40 CFR, Part 15.20.

S-26 USE OF LEAD-BASED PAINTS ON RESIDENTIAL STRUCTURES

If the work under this contract involves construction or rehabilitation of residential structures, the Contractor shall comply with the Lead-based Paint Poisoning Prevention Act (see 42 U.S.C. 4831). The Contractor shall assure that paint used on the project on applicable surfaces does not contain lead in excess of the percentages set forth in Paragraphs (a) and (b) of this section. In determining compliance with these standards, the lead content of the paint shall be measured on the basis of the total nonvolatile content of the paint or on the basis of an equivalent measure of lead in the dried film of paint already applied.

- a. For paint manufactured after June 22, 1977, paint may not contain lead in excess of 6 one-hundredths of 1 percent (.00006) lead by weight.
- b. For paint manufactured on or before June 22, 1977, paint may not contain lead in excess of five-tenths of 1 percent lead by weight.

As a condition to receiving assistance under the Act, recipients shall assure that the restriction against the use of lead-based paint is included in all contracts and subcontracts involving the use of Federal funds.

Definitions

1. "Applicable surfaces" are those exterior surfaces which are readily accessible to children under 7 years of age.
2. "Residential structures" means houses, apartments, or other structures intended for human habitation, including institutional structures where persons reside, which are accessible to children under 7 years of age, such as day care centers, intermediate and extended care facilities, and certain community facilities.

S-27 EDA SIGNS

The Contractor shall supply, erect, and maintain a project sign according to the specifications set forth below:

EDA SITE SIGN SPECIFICATIONS

Size: Sign A: 4' x 8' x 1 7/8" Sign B: 4' x 8' x 3/4"

Materials: Face: Sign A - 1/4" tempered Masonite
Sign B - 3/4" or greater shop sanded (exterior) Plywood (one side only)

Framing: Sign A - 2" x 4" nominal on four sides and center cross bracing
Sign B - 2" x 4" center cross bracing only

Supports: 4" x 4" x 12' nominal post

Assembly: Sign A: 2" x 4" frame to fit 4' x 8' board with 2" x 4" cross braces
Sign B: To be mounted directly to the 4" x 4" post, with cross bracing

Mounting: Signs A and B are to be mounted to the 4" x 4" post with a 3/8" minimum bolt and nut, four on each side of the sign. Each bolt is to have two washers, one between the sign and the head of the bolt and the other between the post and the nut.

Erection: 4" x 4" posts are to be set three to four feet deep into concrete 12" in diameter.

Paint: Face: Three coats outdoor enamel (sprayed)
Rear: One coat outdoor enamel (sprayed)

Colors: Crimson Red, Stark White and Royal Blue. Specifically, white background; "JOBS" in red; "for your community" in blue; "EDA" logo and "PROVIDED BY EQUAL OPPORTUNITY EMPLOYERS, in partnership with the U. S. DEPARTMENT OF COMMERCE - Economic Development Administration" in black. "By working together we can provide economic opportunities for Americans" in black.

Lettering: Silk screen enamels. Lettering sizes and positioning will be as illustrated.

Project signs will not be erected on public highway rights-of-way.

Location and height of signs will be coordinated with the agency responsible for highway or street safety in the area, if any possibility exists for obstruction to traffic line of sight.

If, at the end of the project, the sign is reusable, it shall be disposed of as directed by the EDA Regional Office.

Whenever EDA Site Sign specifications conflict with State law or local ordinances, the EDA Regional Director may modify such conflicting specifications so as to comply with that State law or local ordinance.

SECTION VII: POST CONSTRUCTION GRANT REQUIREMENTS

1. Real Property	
A. Grantee ownership	VII-1
B. EDA's reversionary interest	VII-1
C. Successor grantees	VII-1
D. Applicability of requirements	VII-1
2. Definitions	VII-1
3. Use of Property	
A. Use only for authorized purposes	VII-2
B. Property no longer needed for grant purposes	VII-2
C. Property for lease or sale	VII-2
D. Property substitutions	VII-2
4. Unauthorized Use	
A. Disposal without EDA approval	VII-2
B. EDA actions for disposal without approval	VII-3
5. Federal Share	
A. Calculation of federal share	VII-3
B. Leasehold depreciation	VII-3
C. Transfer to another eligible grantee	VII-3
D. EDA interest after compensation	VII-3
6. Encumbrances	
A. Restrictions on encumbrances	VII-3
B. Compensation for encumbrances	VII-3
C. Waivers	VII-3
D. Water and sewer exceptions	VII-4
7. Civil Rights Restrictions	VII-4
8. Performance Reports	VII-4
9. Record Retention	VII-4
10. Program Income Earned After the Award Period	VII-4

SECTION VIII: EXHIBITS

SECTION VII

POST CONSTRUCTION GRANT REQUIREMENTS

1. Real Property

- A. All property that is acquired or improved with EDA grant assistance shall be held in trust by the grantee for the benefit of the project purposes under which the property was acquired or improved.
- B. During the estimated useful life of the project, EDA retains an undivided equitable reversionary interest in property acquired or improved with EDA grant assistance.
- C. EDA may approve the substitution of an eligible entity for a grantee. The original grantee remains responsible for the period it was the grantee, and the successor grantee holds the project property with the responsibilities of an original grantee under the award.
- D. The requirements contained in this part apply solely to grant and cooperative agreement award projects.

2. Definitions

A. As used in this Section VII:

- (1) Dispose includes sell, lease, abandon, or use for a purpose or purposes not authorized under the grant award or this part.
- (2) Estimated useful life means that period of years from the time of award, determined by EDA as the expected lifespan of the project.
- (3) Grantee includes any recipient, subrecipient, awardee, or subawardee of grant assistance under the Public Works and Economic Development Act of 1965, or under Title II, Chapter 3 of the Trade Act of 1974, Title I of the Public Works Employment Act of 1976, the Public Works Employment Act of 1977, or the Community Emergency Drought Relief Act of 1977, and any EDA-approved successor to such recipient, subrecipient, awardee or subawardee.
- (4) Owner includes fee owner, transferee, lessee, or optionee of real property upon which project facilities or improvements are or will be located, or real property improved under a project which has as its purpose that the property be sold.
- (5) Personal Property means all property other than real property.

- (6) **Project** means the activity and property acquired or improved for which a grant is awarded. When property is used in other programs "project" includes such programs.
- (7) **Property** includes all forms of property, real, personal (tangible and intangible), and mixed.
- (8) **Real property** means any land, improved land, structures, appurtenances thereto, or other improvements, excluding movable machinery and equipment. Improved land also includes land which is improved by the construction of such project facilities as roads, sewers, and water lines which are not situated directly on the land but which contribute to the value of such land as a specific part of the project purpose.

3. Use of property

- A. The grantee or owner shall use any property acquired or improved in whole or in part with grant assistance only for the authorized purpose of the project as long as it is needed during the estimated useful life of the project and such property shall not be leased, sold, disposed of or encumbered without the written authorization of EDA.
- B. In the event that EDA and the grantee determine that property acquired or improved in whole or in part with grant assistance is no longer needed for the original grant purpose, it may be used in other Federal grant programs, or programs that have purposes consistent with those authorized for support by EDA, if EDA approves such use.
- C. When the authorized purpose of the EDA grant is to develop real property to be leased or sold, as determined by EDA, such sale or lease is permitted provided the sale is consistent with the authorized purpose of the grant and with applicable EDA requirements concerning, but not limited to, nondiscrimination and nonrelocation.
- D. When acquiring replacement personal property of equal or greater value, the grantee may trade-in the property originally acquired or sell the original property and use the proceeds in the acquisition of the replacement property, provided that the replacement property shall be used for the project and be subject to the same requirements as the original property.

4. Unauthorized use

- A Except as provided in 3B, 3C, or 3D above, whenever, during the expected useful life of the project, any property acquired or improved in whole or in part with grant assistance is disposed of without the approval of EDA, or no longer used for the authorized purpose of the project, the Federal Government shall be compensated by the grantee for the Federal share of the value of the property; provided that for equipment and supplies, the standards of the Uniform Administrative Requirements for Grants at 15 CFR part 24 and OMB Circular A-110 or any supplements or successors thereto, as applicable, shall apply.

- B. If property is disposed of without approval, EDA may assert its interest in the property to recover the Federal share of the value of the property for the Federal Government. EDA may pursue its rights under both paragraphs A and B of this section, except that the total amount to be recovered shall not exceed the Federal share, plus costs and interest.

5. Federal share.

- A. For purposes of this Section, the Federal share of the value of property is that percentage of the current fair market value of the property attributable to the EDA participation in the project (after deducting actual and reasonable selling and fix-up expenses, if any, incurred to put the property into condition for sale).
- B. Where the grantee's interest in property is a leasehold for a term of years less than the depreciable remaining life of the property, that factor shall be considered in determining the percentage of the Federal share.
- C. If property is transferred from the grantee to another eligible entity, as provided in paragraph 1C above, the Federal Government shall be compensated the Federal share of any money paid by or on behalf of the successor grantee to or for the benefit of the original grantee, provided that EDA may first permit the recovery by the original grantee of an amount not exceeding its investment in the project nor exceeding that percentage of the value of the property that is not attributable to the EDA participation in the project.
- D. When the Federal Government is compensated for the Federal share of the value of property acquired or improved in whole or in part with grant assistance, EDA has no further interest in the ownership, use or disposition of the property.

6. Encumbrances.

- A. Except as provided in paragraph 6C below, grantee-owned property acquired or improved in whole or in part with grant assistance may not be used to secure a mortgage or deed of trust or otherwise be used as collateral or encumbered except to secure a grant or loan made by a State or Federal agency or other public body participating in the same project.
- B. Encumbering such property other than as permitted in this section is an unauthorized use of the property requiring compensation to the Federal Government as provided in paragraphs 4 and 5 above.
- C. EDA may waive the provisions of paragraph 6A above for good cause when EDA determines all of the following:

- (1) All proceeds from the grant/loan to be secured by the encumbrance on the property shall be available only to the grantee, and all proceeds from such secured grant/loan shall be used only on the project for which the EDA grant was awarded or on related activities of which the project is an essential part;
- (2) The lender/grantor would not provide funds without the security of a lien on the project property; and
- (3) There is a reasonable expectation that the borrower/grantee will not default on its obligation.

D. EDA's Assistant Secretary or his designee may waive the provisions of paragraphs A and B above as to an encumbrance on property which is financed by an EDA public works grant when he/she determines that the encumbrance arises solely from the provisions of a pre-existing water or sewer facilities encumbrance which by its terms extends to additional property connected to such facilities. The Assistant Secretary's determination shall make reference to the specific provisions (for example, "water system and all accessions, additions or improvements thereto") which extend the terms of the pre-existing encumbrance to the property which is financed by the EDA public works grant.

7. Civil Rights Restriction

Recipient owners of industrial parks acquired, leased, or improved with EDA assistance may not sell, lease, or otherwise make any part of such premises available for occupancy by any person, firm, or entity unless the occupant first furnishes to the Recipient for transmittal to EDA, properly executed EDA forms evidencing the assurance of such occupant to comply with the Civil Rights Act of 1964.

8. Performance Reports

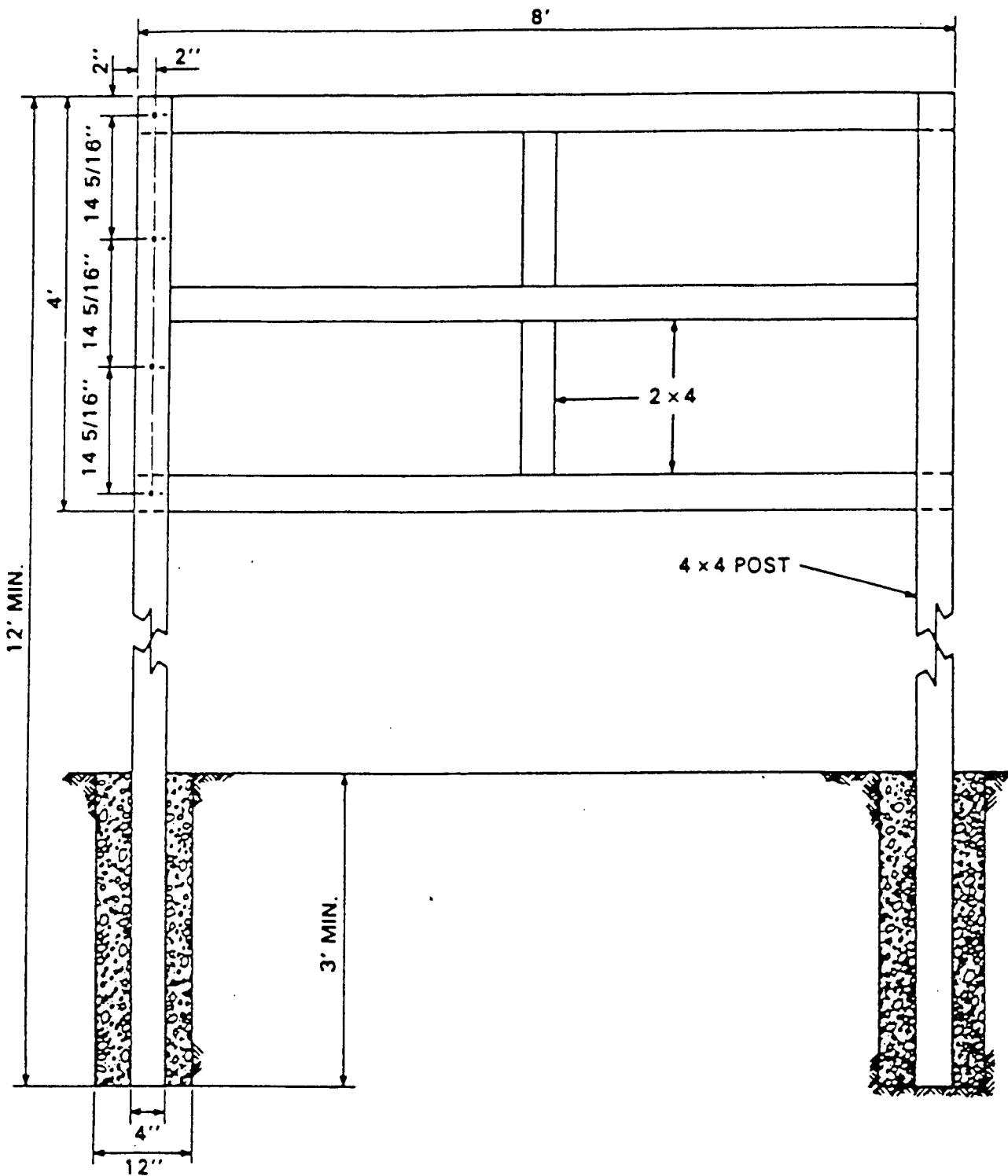
Recipients are responsible for submission to EDA of performance reports after receiving the final grant disbursement. A report will be due two years after, and four years after, the final grant disbursement. See Section I 2 F for further details.

9. Record Retention

Architect/engineering records and payroll records relating to the project must be retained as described in Section I 6 F, Section II 14 H and Section III 9 A.

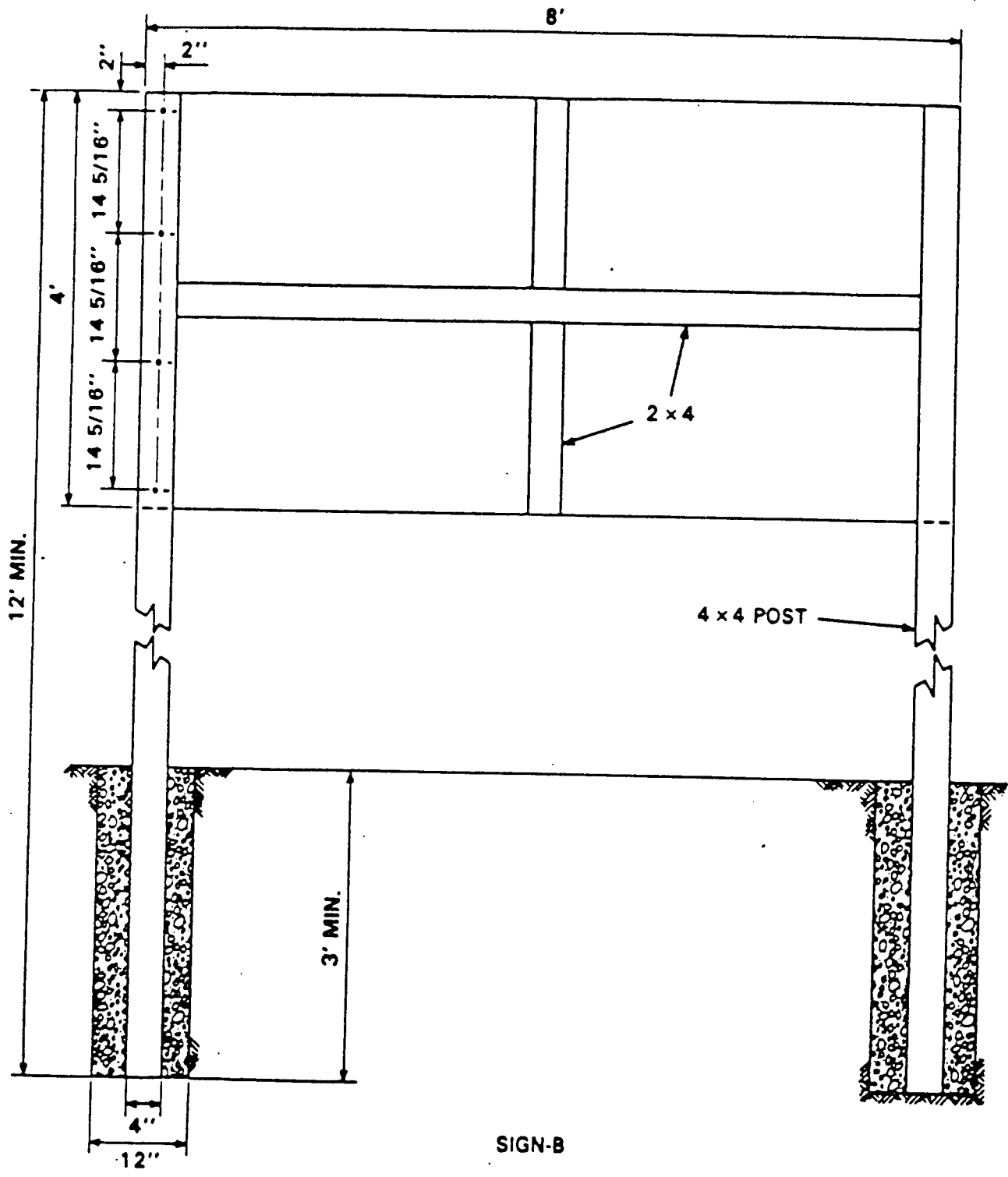
10. Program Income Earned After the Award Period

The uses for program income earned after the award period are described in Section IV 6 H.



ASSEMBLY OF MASONITE SIGN

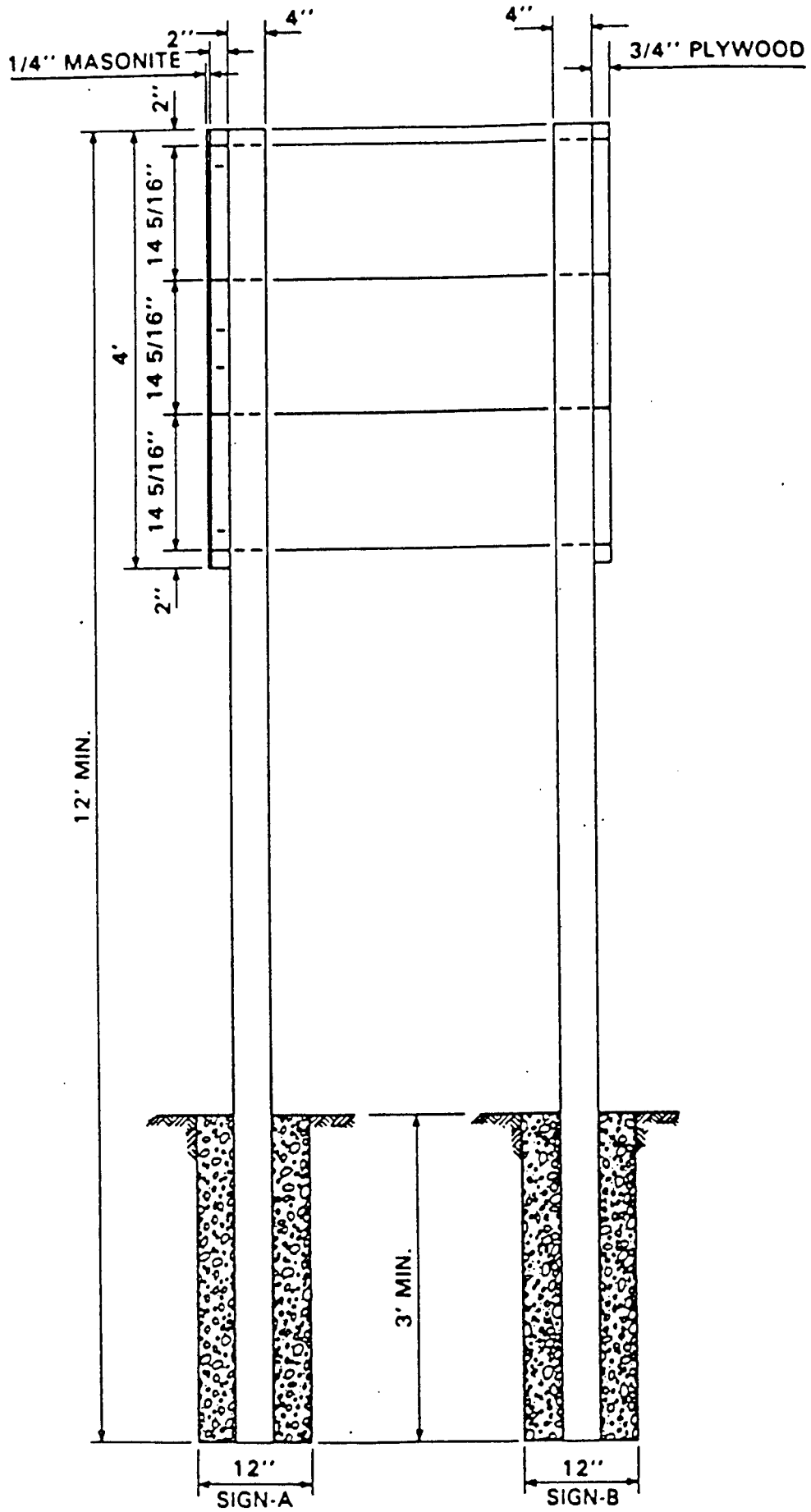
Exhibit B



SIGN-B

ASSEMBLY OF PLYWOOD SIGN

Exhibit B



JOB for your **community**

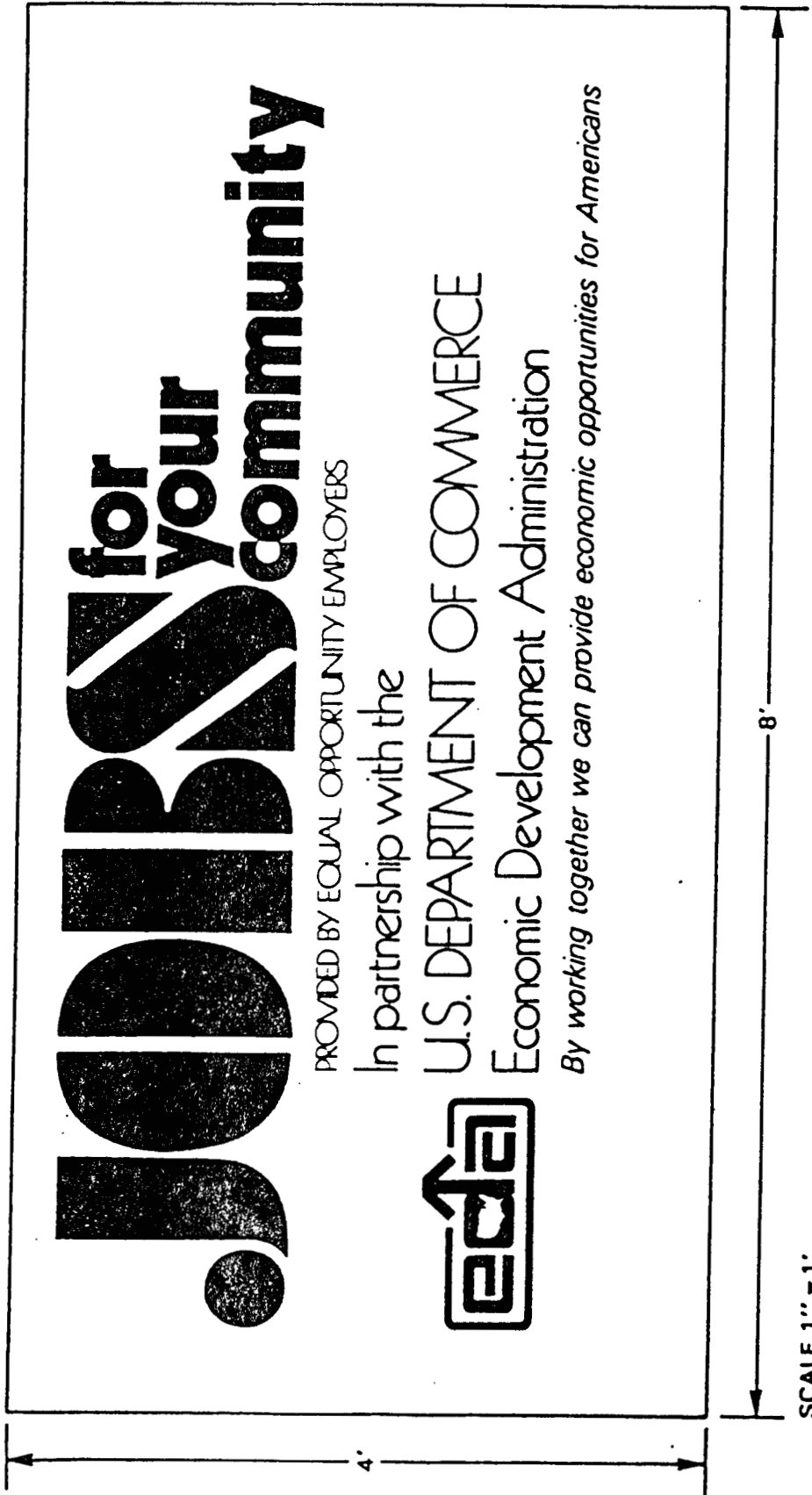
PROVIDED BY EQUAL OPPORTUNITY EMPLOYERS

In partnership with the



U.S. DEPARTMENT OF COMMERCE
Economic Development Administration

By working together we can provide economic opportunities for Americans



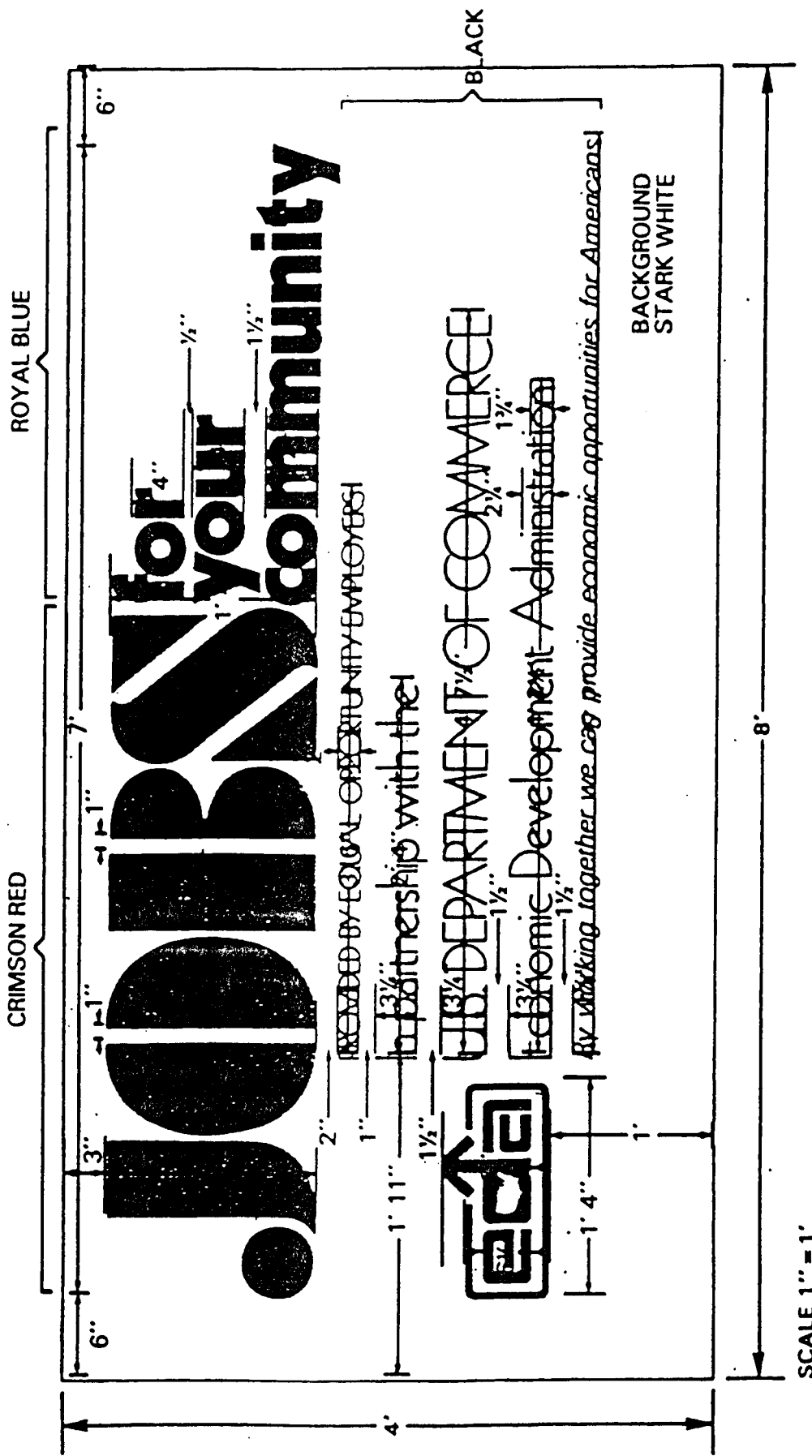


Exhibit B

SPECIAL CONDITIONS

SC-1. GENERAL.

The following Special Conditions, particular to this project, are intended to complement or supplement the preceding General Conditions and shall be of like import.

SC-2. OWNERSHIP.

The completed facilities shall be owned, operated and maintained by HICKORY WATER DISTRICT hereinafter referred to as the OWNER. All workmanship and materials shall be in conformance with the OWNER'S requirements. Acceptance of this project and final payment therefor shall be contingent thereon. The OWNER'S representatives shall have the right of access to the WORK in progress and the right to inspect said WORK.

SC-3. CONTRACT DOCUMENTS.

The following CONTRACT DOCUMENTS shall govern the materials furnished and the WORK to be performed on this contract:

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS ENTITLED "HICKORY WATER DISTRICT, GRAVES COUNTY, KENTUCKY, 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS (500,000 GALLON ELEVATED TANK) - CONTRACT "B", APRIL, 1998 (BID OCTOBER, 1998), EDA PROJECT NO. AKY0382."

CONTRACT DRAWINGS BEING PLANS SHEETS COVER THROUGH 3 ENTITLED "HICKORY WATER DISTRICT, GRAVES COUNTY, KENTUCKY, 1998 INDUSTRIAL PARK WATER SYSTEM IMPROVEMENTS, CONTRACT "B", APRIL, 1998 (BID OCTOBER, 1998), EDA PROJECT NO. AKY0382".

ADDENDA (IF APPLICABLE) TO BE ACKNOWLEDGED IN THE BID.

The CONTRACTOR shall be furnished, without cost, 3 COPIES of all CONTRACT DOCUMENTS with any addenda thereto. Additional copies, if required, may be obtained from the ENGINEER at cost.

SC-4. CLAIMS BY THE CONTRACTOR.

If the CONTRACTOR believes he is entitled to a change in the contract price or time, or both, he shall give the ENGINEER written notice and documentation of the basis for the claim within 7 days of the cause of such claim. The ENGINEER will, within 7 days of such claim notice, either prepare a change order for processing or notify the CONTRACTOR in writing of the reason for rejection. Also see GC-13 and GC-14.

If the ENGINEER'S decision is not acceptable, the CONTRACTOR, within 7 days after the ENGINEER'S response, shall notify the OWNER of his intention to pursue the claim.

As the OWNER has limited funds for this project and must operate within its established budget, no claim shall be recognized or admissible for legal process unless presented as described.

SC-5. PROJECT INSPECTION.

The OWNER may employ supervisors or inspectors to inspect materials furnished and the WORK performed to see that they are in accordance with the Plans, Specifications, and the OWNER'S standards.

Suggestions by or approval of any plan or method of WORK by the OWNER'S representative shall imply consent, but adoption of any such plan or method shall be at the CONTRACTOR'S own risk and responsibility.

PROJECT INSPECTION, TESTS OR APPROVALS BY THE OWNER'S REPRESENTATIVE OR OTHERS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATIONS TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH HEREIN.

Inspectors, and other properly authorized representatives of the OWNER, shall be free always to perform their duties. Intimidation or attempted intimidation of any one of them by the CONTRACTOR or by any of his employees shall be sufficient reason for dismissal of said employee or annulment of the contract.

SC-6. ENVIRONMENTAL PROTECTION.

The CONTRACTOR shall minimize siltation and bank erosion during construction and shall restore disturbed areas to present or better conditions. All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval by either EPA or USDA. Use of all such chemicals and disposal of residue shall be in strict conformance with the instructions.

SC-7. MATERIALS, EQUIPMENT AND WORKMANSHIP.

Unless otherwise specified, all materials and equipment shall be new and shall be of standard quality for the use intended. Reference to a proprietary product of a particular manufacturer or vendor is to establish a standard of quality. The CONTRACTOR may furnish with his bid the name and identifying information of each item upon which his bid is based and if this information is not submitted, he shall be obligated to furnish the product specified.

Approval of samples, shop drawings, etc. shall not mean final acceptance and they shall be subject to inspection and test on delivery and installation. The CONTRACTOR shall repair, replace, and/or adjust any materials or equipment found defective or not operating properly for 1 year after completion and acceptance of his WORK.

The CONTRACTOR shall always require strict discipline and good order among his employees and shall not employ on the WORK any unfit person or anyone not skilled in the WORK assigned to him. Any careless, untrustworthy, or incompetent workers shall be removed upon the request of the ENGINEER or his representative.

SC-8. CONSTRUCTION PROCEDURE.

A complete organization, equipment and ample materials shall be on hand before WORK commences. They shall be satisfactory for securing the quality of WORK specified and for continuous progress for the earliest possible completion of the project.

The CONTRACTOR shall provide and maintain a local project or field office and field telephone throughout the term of the project. A representative of the CONTRACTOR should be available to receive notices and messages during working hours and a local telephone shall be maintained for 24 hour emergency calls.

The Resident Inspector shall be permitted access to and use of the CONTRACTOR'S field office to maintain his records and his communications.

Prior to commencement of WORK, the CONTRACTOR shall:

- a. Notify the ENGINEER of the project superintendent's name and telephone number.
- b. Contact utility companies for location and protection of their facilities.
- c. Notify the ENGINEER, 3 days in advance, of when construction will commence.

No underground WORK shall be covered until it has been inspected by the OWNER'S representative.

SC-9. PROGRESS SCHEDULE.

Prior to commencement of WORK, the CONTRACTOR shall submit a Progress Schedule for the ENGINEER'S approval. The schedule shall show the sequence of the WORK for continuous progress. It shall be used for coordination of the OWNER'S operations, for the Inspector's scheduling, and as a basis for justifying a time extension, if required.

The Progress Schedule shall be revised (as required) and updated at the time each payment request is submitted as outlined in the General Conditions.

SC-10. RIGHTS-OF-WAY.

The OWNER shall furnish all land and rights-of-way required on this project. He shall obtain all permits and easements for crossings or occupancy of highways, railroads and other public and private property. No WORK shall be begun until the CONTRACTOR has a copy of said permit or easement and can comply with all requirements thereof.

SC-11. PERMITS.

Unless otherwise noted, the CONTRACTOR shall be responsible for the cost of all electric service hookups, Building Permits, Electrical Inspection Permits, Plumbing Permits, etc. and shall arrange for such permits to prevent delay in his WORK.

The CONTRACTOR shall also be responsible for the cost of running new electrical service, if required.

SC-12. WORKING HOURS.

WORK shall not exceed 40 hours per week and no WORK will be done between the hours of 6:00 P.M. and 7:00 A.M. nor on Saturdays, Sundays or legal holidays, without the written approval or permission of the ENGINEER in each case.

SC-13. CLEANUP AND RESTORATION.

The CONTRACTOR shall continuously maintain cleanup operations along the line of WORK and near any structures. Cleanup shall include the removal of all refuse, rubbish, scrap materials and debris and the finish dressing (hand raking, if necessary) of all areas to the satisfaction of the ENGINEER. Restoration shall include maintenance of any settled trenches and landscaping, if required. No item of WORK shall be considered complete until cleanup and restoration are accomplished and, if not satisfactory in the opinion of the ENGINEER, payment may be withheld until such cleanup and restoration are accomplished.

The Contractor shall protect all shrubbery and shall be responsible for replacing any damaged shrubbery to the property owner's satisfactions. Restoration shall be in accordance with Specification 14.

SC-14. MAINTENANCE OF TRAFFIC AND SAFETY.

The CONTRACTOR shall, at his own expense, provide and maintain suitable accommodations for public and private travel near his WORK. Adequate warning signs, lights, barricades and other safety devices shall be maintained and shall comply with the requirements of any governing agency.

The local fire department, school district, etc. shall be notified of all detours and route changes.

SC-15. EXISTING UTILITIES.

It shall be the CONTRACTOR'S sole responsibility to learn the exact location of all utilities; to notify the utility OWNER; to protect all utilities through his operations; and to pay for any damage that may occur.

The exact location of existing utilities, either aboveground or underground, shall be determined by the CONTRACTOR far enough in advance of the WORK to permit adjustments in alignment or protection of the utility. Existing utilities, if shown on the Plans, are only approximate to alert the CONTRACTOR of their existence.

If the CONTRACTOR fails to locate existing utilities far enough in advance to permit realignment of the WORK, relocation of the existing utility or of the WORK shall be at his expense.

SC-16. MAINTAINING WATER SERVICE.

The CONTRACTOR shall maintain water service to all customers throughout construction and shall organize his WORK for the least inconvenience to all customers and residents. All customers whose water service will be interrupted shall be notified by the CONTRACTOR, in advance, and service shall be restored as soon as possible.

SC-17. PROGRESS PAYMENTS.

The 13th day of the month shall be used as a cut-off date for figuring monthly partial payments. Requests for partial payments shall be submitted for the ENGINEER'S approval not later than the 18th day of the month. Payment of said estimate shall be made by the 20th day of the following month.

Payrolls, with the necessary certification, shall be submitted to the proper authorities in accordance with the applicable regulations and a copy of the transmittal letter and 1 copy of the payroll shall be submitted to the OWNER. One copy of the transmittal letter shall be submitted to the ENGINEER.

SC-18. AFFIDAVIT OF PAYMENT.

Upon completion of the WORK, but before the acceptance thereof by the OWNER, the CONTRACTOR shall furnish proof in documentary form that all claims, liens, or other obligations incurred by him and all of his contractors in connection with the performance of the WORK have been properly paid and settled. This information shall be in affidavit form and shall bear the authorization of the surety company, if applicable.

SC-19. "OR EQUAL" CLAUSE.

It shall be the CONTRACTOR'S responsibility to furnish substantiating data that any product is equal to or better than the proprietary product specified.

SC-20. PROTECTION OF PROPERTY AND PUBLIC LIABILITY.

The CONTRACTOR shall assume full responsibility for the protection of all public and private property both above and below ground where WORK under this project is being performed.

The CONTRACTOR shall indemnify and save harmless the OWNER, the OWNER'S Representatives and the ENGINEER from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought against him due to any act or omission of the said CONTRACTOR, his agents, or employees in the execution of the WORK or in its protection.

Said responsibilities shall apply despite the location of the damage and it shall be the CONTRACTOR'S sole responsibility to make such corrections and adjustments to the satisfaction of those whose property or premises have been damaged by his operation.

SC-21. LIABILITY.

The OWNER or ENGINEER shall not be liable for the safety of persons or property on or about a construction project site, or for the construction techniques, procedures, sequences and schedules, or for the conduct, action, errors, or omissions of the CONTRACTOR, his subcontractors, or his material suppliers, their agents or employees.

Further, it is the CONTRACTOR'S responsibility to protect and save harmless the OWNER and ENGINEER from any suits arising out of claims including the hiring, at his own expense, of the necessary professional help to defend the OWNER and ENGINEER.

The CONTRACTOR is also referred to the General Conditions regarding liability, protection of property, etc.

SC-22. EMERGENCIES.

In an emergency that threatens loss or injury to persons or property, the CONTRACTOR will be allowed to act diligently without previous instructions from the ENGINEER.

Wherever, in the opinion of the ENGINEER, an emergency exists and immediate action is considered necessary, the performance of emergency WORK under the direction of the ENGINEER, with or without notice to the CONTRACTOR, shall in no way relieve the CONTRACTOR of responsibility for damage that may occur.

SC-23. SAFETY AND SANITARY REGULATIONS.

The CONTRACTOR shall comply with all local, State and Federal safety and sanitary regulations that may apply on this project.

SAFETY ON AND AROUND THE JOB SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

SC-24. SHOP DRAWINGS.

In accordance with the General Conditions, the CONTRACTOR shall submit 8 COPIES of Shop Drawings for all materials furnished and certify to their compliance with the Specifications. The CONTRACTOR'S certification shall be as follows:

PROJECT TITLE	_____
CONTRACT:	_____
BID ITEM NO.:	_____
WE CERTIFY THAT THIS SHOP DRAWING SUBMITTAL IS IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS FOR THE ABOVE PROJECT.	
NO EXCEPTION:	_____
EXCEPTION:	_____
APPROVED BY:	_____
DATE:	_____

TWO COPIES of the approved shop drawings shall be returned to the CONTRACTOR.

SC-25. WAGE DETERMINATION.

WORK on this project shall be subject to prevailing wage rates for public works that are current at the time of bidding and are included herein.

The CONTRACTOR, in preparing his bid, agrees to the terms of the prevailing wage rates as part of this project without additional compensation.

SC-26. WEATHER CONDITIONS.

No portion of the WORK shall be constructed under conditions that would adversely affect the quality or efficiency thereof. The CONTRACTOR shall be responsible for protecting his WORK and materials against damage or injury from the weather.

SC-27. TIME EXTENSIONS FOR ABNORMAL WEATHER.

This section specifies the procedure for the determination of time extensions due to abnormal and unforeseeable weather as outlined in the General Conditions, Section 15.4.2. Reference is also made to Section 15.4 regarding prompt written notice.

For the purposes of this section the term "adverse weather day" shall mean a day when construction cannot proceed due to precipitation (not wet conditions caused by precipitation), provided the CONTRACTOR is prevented from working for 50 percent or more of his normal WORK day.

The listing below defines the monthly anticipated adverse weather days (including weekends and holidays) and shall form the "base line" for monthly (or portion thereof) weather time evaluation.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
12	12	10	10	10	8	8	8	7	10	11	11

Upon acknowledgment of the Notice To Proceed, the CONTRACTOR shall keep an accurate and detailed record of actual adverse weather days monthly (including weekends and holidays) and this shall be compared to the anticipated adverse weather days listed above.

Time extensions shall be granted only where adverse weather affects WORK shown on the Progress Schedule.

At the end of each month, the CONTRACTOR shall request from the ENGINEER, in writing, a time extension based on the number of actual adverse days that exceeded the anticipated adverse days. Supporting documentation shall be furnished.

The ENGINEER shall review the information and notify the CONTRACTOR whether the request is justified. If the request is justified, a change order will be processed later.

SC-28. PRECONSTRUCTION CONFERENCE.

The CONTRACTOR shall attend a preconstruction conference with the OWNER, ENGINEER, and any other interested parties prior to commencement of WORK. Construction procedures and requirements shall be outlined and discussed in detail.

SC-29. PROJECT SIGN.

A project sign is required on this project and will be provided through Contract "A".

SC-30. BASIS OF BID.

The bid, and all the items and subitems thereof, shall be made on the attached form that shall be filled out completely. All the costs of the WORK and payment therefor shall be included in the lump-sum and unit prices set forth in the proposal form. No item of WORK that is required by the CONTRACT DOCUMENTS shall be paid for outside of, or in addition to, the prices submitted on the proposal form unless specifically authorized by a proper change order and unit prices shall control.

The following is to clarify the basis of bidding:

CONTRACT "B":

1. Elevated Tank.

Payment for the Elevated Tank shall be at the lump sum bid for the work complete and ready for use in accordance with the Plans and Specifications. The cost breakdown of component parts of this bid item shall be complete and the totals must equal the lump sum amount bid. The breakdown may be used for additions, deletions and/or a basis for partial payments.

2. Abandon Existing Pedesphere.

Payment for this item shall be at the lump sum bid for all work associated with dismantling, removal and proper disposal of the existing Highway 121 pedesphere. The work shall include landscaping, seeding, electrical equipment removal, and disconnection from the water supply.

GENERAL DECISION KY980025 08/14/98 **KY25**
 General Decision Number KY980025

RECEIVED SEP 11 1998

Superseded General Decision No. KY970025

State: Kentucky

Construction Type:
 HEAVY
 HIGHWAY

County(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

Heavy and Highway Construction Projects

Modification Number	Publication Date
0	02/13/1998
1	02/20/1998
2	04/03/1998
3	05/22/1998
4	06/05/1998
5	06/19/1998
6	07/06/1998
7	07/24/1998
8	08/14/1998

COUNTY(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

BRIN0004C 04/01/1998

Rates Fringes
 CRITTENDEN, DAVIESS, HANCOCK, HENDERSON, LIVINGSTON, MCLEAN,
 OHIO, UNION & WEBSTER COUNTIES:

BRICKLAYERS	21.61	5.15
-------------	-------	------

BRTN0004E 05/01/1997

Rates Fringes
 ALLEN, BALLARD, BUTLER, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN,
 EDMONSON, FULTON, GRAVES, HICKMAN, HOPKINS, LOGAN, LYON,
 MARSHALL, MCCRACKEN, MUHLENBERG, SIMPSON, TODD, TRIGG & WARREN
 COUNTIES:

BRICKLAYERS	19.09	1.60
-------------	-------	------

 CARP0357C 07/01/1998

	Rates	Fringes
CARPENTERS	18.45	4.93
PILED RIVERMEN	18.70	4.93
DIVERS	28.05	4.93

CARP1031M 06/01/1998

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:		
MILLWRIGHTS	20.20	7.95

CARP1080E 06/16/1997

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, TODD & TRIGG COUNTIES:		
MILLWRIGHTS	19.05	5.37

CARP1080G 06/01/1997

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		
MILLWRIGHTS	19.40	6.67

ELEC0369I 06/01/1998

	Rates	Fringes
BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:		
ELECTRICIANS	22.25	6.34

ELEC0429B 01/01/1994

	Rates	Fringes
ALLEN & SIMPSON COUNTIES:		
ELECTRICIANS	15.85	4.115

ELEC0816E 06/01/1997

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:		
ELECTRICIANS:		
Electricians	21.22	6.41
Cable Splicers	21.47	6.45

ELEC1701C 06/01/1997

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		
ELECTRICIANS:		
Electricians	20.38	6.62

Heilarc Welding; & Cable Splicing	20.63	6.67
-----------------------------------	-------	------

ELEC1925B 01/01/1994

	Rates	Fringes
FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):		
ELECTRICIANS	15.00	4.25

ENGI0181X 01/01/1998

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	19.55	5.90
GROUP 2	17.13	5.90
GROUP 3	17.51	5.90
GROUP 4	16.87	5.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Central Compressor Plant; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Elevating Grader & Loaders; Grade-All; Gurrries; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; & Truck Crane

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES WITH BOOMS 150 ft. & Over (Including JIB) \$.50 Premium

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0070G 06/01/1998

Rates Fringes

BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);

EDMONSON COUNTY (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden):

IRONWORKERS:

Structural; Ornamental;		
Reinforcing; Precast Concrete		
Erectors	20.26	9.32

IRON0103E 04/01/1998

Rates Fringes

BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs Creek);

CALDWELL COUNTY (Northeastern third, including the Township of Creswell);

CHRISTIAN COUNTY (Northern third, including the Townships of Apex, Crofton, Kelly, Mannington & Wynns);

CRITTENDEN COUNTY (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove & Tribune);

MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly, South Carrollton, Tarina & Weir);

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:

IRONWORKERS	20.35	8.80
-------------	-------	------

IRON0492C 05/01/1998

Rates Fringes

BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury);

CHRISTIAN COUNTY (Eastern two-thirds, including the Townships of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

EDMONSON COUNTY (Southern fourth, including the Townships of Chalybeate & Rocky Hill);

MUHLENBERG COUNTY (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood);

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES:

IRONWORKERS	16.48	4.87
-------------	-------	------

IRON0782H 05/01/1998

	Rates	Fringes
CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);		

CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told);

HALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

IRONWORKERS:

Projects with a total contract cost of \$20,000.00 or above	19.40	8.81
All Other Work	18.10	7.77

LABO0189E 07/01/1998

	Rates	Fringes
LABORERS:		
GROUP 1	14.97	4.53
GROUP 2	15.22	4.53
GROUP 3	15.27	4.53
GROUP 4	15.87	4.53

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Drill Tender; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; & Wrecking of Concrete Form

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonry; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving

Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; & Wagon Driller

GROUP 3 - Air Track Driller; Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Powderman & Blaster; Side Rail Setter; Rail Paved Ditch; Screw Operator; Tunnel (Free Air); & Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;
 Environmental - Nuclear, Radiation, Toxic & Hazardous Waste -
 Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; &
 Tunnel Mucker (Free Air)

PAIN0032E 07/01/1997

	Rates	Fringes
BALLARD COUNTY:		
PAINTERS:		
Bridges & Dams	22.40	5.03
All Other Work	18.10	5.03

Epoxy or Toxic; Lead-Based Paint Work - \$1.50 Premium

PAIN0118C 05/01/1998

	Rates	Fringes
EDMONSON COUNTY:		
PAINTERS:		
Brush	15.57	4.00
Abrasive Blaster; Fireproofing; Lead Abatement; Spray; & Waterblasting 4000 PSI and Above	16.07	4.00

PAIN0156G 04/01/1998

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:		
PAINTERS:		
BRIDGES, LOCKS & DAMS:		
GROUP 1	20.65	5.18
GROUP 2	20.90	5.18
GROUP 3	21.65	5.18
GROUP 4	22.65	5.18
ALL OTHER WORK:		
GROUP 1	19.50	5.18
GROUP 2	19.75	5.18
GROUP 3	20.50	5.18
GROUP 4	21.50	5.18

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast;
 Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch
 Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar
 Epoxy

PAIN0456D 05/01/1997

	Rates	Fringes
--	-------	---------

ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN
COUNTIES:

PAINTERS:

Brush	14.63	3.75
Spray; Sandblast; Boswain Chair or Heights over 50 feet	15.13	3.75

PAIN0500C 05/01/1998

Rates Fringes
CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON,
GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN
& TRIGG COUNTIES:

PAINTERS:

Bridges & Dams	19.00	4.52
All Other Work	14.75	4.52

Spray, Sandblasting & Waterblasting - units with 3500 PSI and
above - \$.50 premium

Work 40 ft. and above ground level - \$1.00 premium

* PLUM0107E 08/01/1998

Rates Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:

PLUMBERS; GAS FITTERS:

Plumbing contracts less than \$150,000.00	17.24	5.17
All Other Plumbing contracts	22.16	5.17

PLUM0184C 07/01/1998

Rates Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,
FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN
& TRIGG COUNTIES:

PLUMBERS & STEAMFITTERS	22.08	6.51
-------------------------	-------	------

* PLUM0522C 08/01/1998

Rates Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:

PIPEFITTERS & STEAMFITTERS	23.40	6.45
----------------------------	-------	------

PLUM0633B 01/01/1998

Rates Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG,
OHIO, TODD, UNION & WEBSTER COUNTIES:

PLUMBERS & PIPEFITTERS	21.935	5.38
------------------------	--------	------

TEAM0089C 03/31/1998

Rates Fringes
TRUCK DRIVERS:
ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:

GROUP 1	15.59	7.025
GROUP 2	15.82	7.025
GROUP 3	15.89	7.025
GROUP 4	15.90	7.025

BALLARD, CALLOWAY, CALDWELL, CARLISLE, CHRISTIAN, CRITTENDEN,
 FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN,
 TODD & TRIGG COUNTIES:

GROUP 1	19.74	2.95
GROUP 2	19.97	2.95
GROUP 3	20.04	2.95
GROUP 4	20.05	2.95

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO,
 UNION & WEBSTER COUNTIES:

GROUP 1	17.23	6.05
GROUP 2	17.46	6.05
GROUP 3	17.53	6.05
GROUP 4	17.54	6.05

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Greaser, Tire Changer

GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump & Flatbed; Terrain Vehicle when used
 to haul materials; Semi-Trailer or Pole Trailer when used to

pull building materials & equipment; Tandem Axle Dump;
 Distributor; & Mixer

GROUP 4 - Euclid, Other Heavy Earthmoving Equipment & Lowboy;
 Articulator Cat Truck & 5 Axle Vehicle; Winch & A-Frame when
 used in transporting materials; Ross Carrier; Fork Lift Truck
 when used to transport building materials; & Drivers on
 Pavement Breaker

 WELDERS - Receive rate prescribed for craft performing operation
 to which welding is incidental.
 =====

Unlisted classifications needed for work not included within
 the scope of the classifications listed may be added after
 award only as provided in the labor standards contract clauses
 (29 CFR 5.5(a)(1)(v)).

 In the listing above, the "SU" designation means that rates
 listed under that identifier do not reflect collectively
 bargained wage and fringe benefit rates. Other designations
 indicate unions whose rates have been determined to be
 prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can
 be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a
 position on a wage determination matter

* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

NOTICE
THIS DETERMINATION APPLIES TO
PROJECT NO. 083-2-0021-98-3

COMMISSIONER'S CURRENT REVISION
KENTUCKY PREVAILING WAGE DETERMINATION
GRAVES COUNTY

Determination No. CR-3-083

Date of Determination: February 17, 1998

This schedule of the prevailing rate of wages for Graves County has been determined in accordance with the provisions of KRS 337.505 to 337.550. The commissioner has chosen to adopt the prevailing wages as determined by the United States Department of Labor for this county. This determination shall be referred to as Prevailing Wage Determination No. CR-3-083, which includes General Decision Nos. KY980029 for Building Construction and KY980025 for Heavy/Highway Construction. This will also include any modifications since the original publication date of this determination.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) per day, or in excess of forty (40) per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one workday, but not more than ten (10) hours worked in any one workday, if such written agreement is prior to the over eight (8) hours in a workday actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

Page Two
CR-3-083
February 17, 1998

NOTE: The type of construction shall be determined by applying the following definitions.

BUILDING CONSTRUCTION

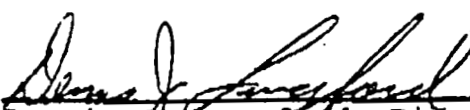
Building construction is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. It includes all construction of such structures, the installation of utilities and the installation of equipment, both above and below grade level, as well as incidental grading, utilities and paving.

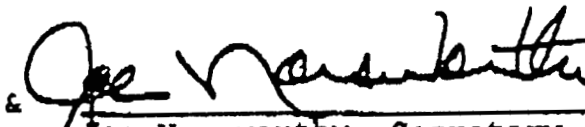
HIGHWAY CONSTRUCTION

Highway construction includes the construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction. It includes all incidental construction in conjunction with the highway construction project.

HEAVY CONSTRUCTION

Heavy projects are those projects that are not properly classified as either "building" or "highway". For example, dredging projects, water and sewer line projects, dams, flood control projects, sewage treatment plants and facilities, and water treatment plants and facilities are considered heavy.


Dennis J. Langford, Director
Employment Standards,
Apprenticeship & Training
Kentucky Labor Cabinet


Joe Norsworthy, Secretary
Kentucky Labor Cabinet
Frankfort, Kentucky 40601

This 17th day of February, 1998.

GENERAL DECISION KY980025 08/14/98 KY25
 General Decision Number KY980025

Superseded General Decision No. KY970025

State: Kentucky

Construction Type:
 HEAVY
 HIGHWAY

County(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

Heavy and Highway Construction Projects

Modification Number	Publication Date
0	02/13/1998
1	02/20/1998
2	04/03/1998
3	05/22/1998
4	06/05/1998
5	06/19/1998
6	07/06/1998
7	07/24/1998
8	08/14/1998

COUNTY(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

BRIN0004C 04/01/1998

Rates Fringes
 CRITTENDEN, DAVIESS, HANCOCK, HENDERSON, LIVINGSTON, MCLEAN,
 OHIO, UNION & WEBSTER COUNTIES:

BRICKLAYERS 21.61 5.15

BRTN0004E 05/01/1997

Rates Fringes
 ALLEN, BALLARD, BUTLER, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN,
 EDMONSON, FULTON, GRAVES, HICKMAN, HOPKINS, LOGAN, LYON,
 MARSHALL, MCCRACKEN, MUHLENBERG, SIMPSON, TODD, TRIGG &
 WARREN
 COUNTIES:

BRICKLAYERS 19.09 1.60

CARP0357C 07/01/1998

Rates Fringes
 CARPENTERS 18.45 4.93
 PILEDRIVERMEN 18.70 4.93
 DIVERS 28.05 4.93

CARP1031M 06/01/1998

Rates Fringes
 ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:

MILLWRIGHTS 20.20 7.95

CARP1080E 06/16/1997

Rates Fringes
 BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,
 FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL,
 MCCRACKEN, TODD & TRIGG COUNTIES:

MILLWRIGHTS 19.05 5.37

CARP1080G 06/01/1997

Rates Fringes
 DAVIESS, HANCOCK, HENDERSON, MCLEAN, MUHLENBERG, OHIO, UNION &
 WEBSTER COUNTIES:

MILLWRIGHTS	19.40	6.67

ELEC0369I 06/01/1998

	Rates	Fringes
BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:		

ELECTRICIANS	22.25	6.34

ELEC0429B 01/01/1994

	Rates	Fringes
ALLEN & SIMPSON COUNTIES:		

ELECTRICIANS	15.85	4.115

ELEC0816E 06/01/1997

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:		

ELECTRICIANS:		
Electricians	21.22	6.41
Cable Splicers	21.47	6.45

ELEC1701C 06/01/1997

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		

ELECTRICIANS:		
Electricians	20.38	6.62
Heilarc Welding; & Cable Splicing	20.63	6.67

ELEC1925B 01/01/1994

	Rates	Fringes
FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):		

ELECTRICIANS	15.00	4.25

ENGI0181X 01/01/1998

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	19.55	5.90
GROUP 2	17.13	5.90
GROUP 3	17.51	5.90
GROUP 4	16.87	5.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Central Compressor Plant; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Elevating Grader & Loaders; Grade-All; Guries; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; & Truck Crane

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine;
 Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler;
 Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack;
 Oiler; Paving Joint Machine; Power Form Handling Equipment;
 Pump; Roller (Earth); Steerman; Tamping Machine; Tractor
 (Under 50 H.P.); & Vibrator

CRANES WITH BOOMS 150 ft. & Over (Including JIB) \$.50 Premium

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%
 ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0070G 06/01/1998

	Rates	Fringes
BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);		

EDMONSON COUNTY (Northern three-fourths, including the Townships
 of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock,
 Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish
 &
 Sweden):

IRONWORKERS:

Structural; Ornamental;
 Reinforcing; Precast Concrete
 Erectors

20.26	9.32
-------	------

IRON0103E 04/01/1998

	Rates	Fringes
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welch Creek);		

CALDWELL COUNTY (Northeastern third, including the Township of
 Creswell);

CHRISTIAN COUNTY (Northern third, including the Townships of
 Apex, Crofton, Kelly, Mannington & Wynns);

CRITTENDEN COUNTY (Northeastern half, including the Townships of
 Grove, Mattoon, Repton, Shady Grove & Tribune);

MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction,

Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly, South Carrollton, Tarina & Weir);

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:

IRONWORKERS	20.35	8.80
-------------	-------	------

IRON0492C 05/01/1998

	Rates	Fringes
BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury);		

CHRISTIAN COUNTY (Eastern two-thirds, including the Townships of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

EDMONSON COUNTY (Southern fourth, including the Townships of Chalybeate & Rocky Hill);

MUHLENBERG COUNTY (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood);

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES:

IRONWORKERS	16.48	4.87
-------------	-------	------

IRON0782H 05/01/1998

	Rates	Fringes
CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);		

CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told);

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON,
LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

IRONWORKERS:

Projects with a total contract cost of \$20,000,000.00 or above	19.40	8.81
All Other Work	18.10	7.77

LABO0189E 07/01/1998

LABORERS:	Rates	Fringes
GROUP 1	14.97	4.53
GROUP 2	15.22	4.53
GROUP 3	15.27	4.53
GROUP 4	15.87	4.53

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement
Worker;

Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender;
Cement Mason Tender; Cleaning of Machines; Concrete;
Demolition; Dredging; Drill Tender; Environmental - Nuclear,
Radiation, Toxic & Hazardous Waste - Level D; Flagperson;
Grade
Checker; Hand Digging & Hand Back Filling; Highway Marker
Placer; Landscaping, Mesh Handler & Placer; Puddler;
Railroad;
Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail &
Fence
Installer; Signal Person; Sound Barrier Installer; Storm &
Sanitary Sewer; Swamper; Truck Spotter & Dumper; &
Wrecking of
Concrete Form

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason

Tender; Mortar Mixer Operator; Burner & Welder; Bushhammer;
Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man;
Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic
& Hazardous Waste - Level C; Forklift Operator for Masonary;
Form Setter; Green Concrete Cutting; Hand Operated Grouter &
Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven

Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
 Precast
 Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand
 Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator;
 & Wagon Driller

GROUP 3 - Air Track Driller; Asphalt Luteman & Raker; Gunnite
 Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator;
 Powderman & Blaster; Side Rail Setter; Rail Paved Ditch;
 Screw
 Operator; Tunnel (Free Air); & Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;
 Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
 -
 Levels A & B; Miner & Driller (Free Air); Tunnel
 Blaster; &
 Tunnel Mucker (Free Air)

 PAIN0032E 07/01/1997

	Rates	Fringes
BALLARD COUNTY:		
PAINTERS:		
Bridges & Dams	22.40	5.03
All Other Work	18.10	5.03
Epoxy or Toxic; Lead-Based Paint Work - \$1.50 Premium		

 PAIN0118C 05/01/1998

	Rates	Fringes
EDMONSON COUNTY:		
PAINTERS:		
Brush	15.57	4.00
Abrasive Blaster; Fireproofing; Lead Abatement; Spray; &		
Waterblasting 4000 PSI and Above	16.07	4.00

 PAIN0156G 04/01/1998

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:		

PAINTERS:

BRIDGES, LOCKS & DAMS:

GROUP 1	20.65	5.18
GROUP 2	20.90	5.18
GROUP 3	21.65	5.18
GROUP 4	22.65	5.18

ALL OTHER WORK:

GROUP 1	19.50	5.18
GROUP 2	19.75	5.18
GROUP 3	20.50	5.18
GROUP 4	21.50	5.18

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast;
 Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch
 Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar
 Epoxy

 PAIN0456D 05/01/1997

ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN
 COUNTIES: Rates Fringes

PAINTERS:

Brush	14.63	3.75
Spray; Sandblast; Boswain Chair or Heights over 50 feet	15.13	3.75

PAIN0500C 05/01/1998

CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON,
 GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN
 & TRIGG COUNTIES: Rates Fringes

PAINTERS:

Bridges & Dams	19.00	4.52
All Other Work	14.75	4.52

Spray, Sandblasting & Waterblasting - units with 3500 PSI and above - \$.50 premium

Work 40 ft. and above ground level - \$1.00 premium

* PLUM0107E 08/01/1998

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:		

PLUMBERS; GAS FITTERS:

Plumbing contracts less than \$150,000.00	17.24	5.17
All Other Plumbing contracts	22.16	5.17

PLUM0184C 07/01/1998

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,		

FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

PLUMBERS & STEAMFITTERS	22.08	6.51
-------------------------	-------	------

* PLUM0522C 08/01/1998

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:		

PIPEFITTERS & STEAMFITTERS	23.40	6.45
----------------------------	-------	------

PLUM0633B 01/01/1998

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, TODD, UNION & WEBSTER COUNTIES:		

PLUMBERS & PIPEFITTERS	21.935	5.38
------------------------	--------	------

TEAM0089C 03/31/1998

	Rates	Fringes
TRUCK DRIVERS:		

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:

GROUP 1	15.59	7.025
GROUP 2	15.82	7.025
GROUP 3	15.89	7.025
GROUP 4	15.90	7.025

BALLARD, CALLOWAY, CALDWELL, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, TODD & TRIGG COUNTIES:

GROUP 1	19.74	2.95
GROUP 2	19.97	2.95
GROUP 3	20.04	2.95
GROUP 4	20.05	2.95

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:

GROUP 1	17.23	6.05
GROUP 2	17.46	6.05
GROUP 3	17.53	6.05
GROUP 4	17.54	6.05

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Greaser, Tire Changer

GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump & Flatbed; Terrain Vehicle when used to haul materials; Semi-Trailer or Pole Trailer when used to pull building materials & equipment; Tandem Axle Dump; Distributor; & Mixer

GROUP 4 - Euclid, Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat Truck & 5 Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Fork Lift Truck when used to transport building materials; & Drivers on Pavement Breaker

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter
- a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an

interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

SPECIFICATION 11A

ELEVATED TANK

11A-1. SCOPE.

This Specification is a technical description of the materials, equipment, construction systems, the standards and workmanship for work applying to elevated tanks and related appurtenances complete and ready for use. The drawings show the characteristics and scope of the work to be performed. All materials, design and work shall conform with AWWA D100 for the tanks, AWWA D102 for painting, and OSHA requirements for confined space entry and climbing.

11A-2. GENERAL.

The site for the elevated tank is a 1 acre tract in Graves County, Kentucky, lying West of U. S. Highway 45 and in the Northwest corner of the Mayfield-Graves County Local Development Corporation and Industrial Development Board of Mayfield-Graves County, Inc. property.

11A-3. ITEMS TO BE FURNISHED BY OWNER.

The following items shall be furnished by the Owner, either directly or through Contract A, as spelled out in Specification 7, "Miscellaneous Work and Equipment". These will be available to the Tank Contractor without delay:

a. **Site.**

The site and a means of ingress and egress shall be furnished.

b. **Site Improvements.**

All roads, drives, parking areas, clearing, grading, drainage, and landscaping shall be furnished.

c. **Piping to Service**

Piping to service, from the end of the connecting pipe extended approximately 5 feet from the center pier valve pit, and including fittings, valves, and the fire hydrant shall be furnished.

d. **Electric Service.**

The Owner shall furnish the panel board, conduit and all electrical service to the Tank Contractor's junction boxes or terminal points approximately 5 feet above the ground on the tank columns and/or riser pipe. The cathodic equipment supplier shall be responsible for connection to his equipment. The Owner shall be responsible for all work associated with the radio control equipment.

e. **Water.**

Water for filling the tank shall be furnished 1 time each for testing and for disinfection. Additional filling, if required, shall be at the rate of \$1.00 per thousand gallons.

f. **Soil Investigation.**

Subsurface investigation and foundation recommendations have been made at the site and the entire report is incorporated at the end of this Specification. The Contractor is responsible for all recommendations and specifications included therein.

11A-4. BASIS OF DESIGN.

The basis of design shall conform with all applicable portions of AWWA D100 for foundations, materials, structural and general design, welding, fabrication, erections, etc.

IN ADDITION TO THE REQUIREMENTS OF AWWA D100 REGARDING JOINTS, ALL JOINTS SHALL BE WELDED ON BOTH SIDES.

All aspects of the design shall be performed under the direct supervision of a Professional Engineer registered in the State of Kentucky and the submittal drawings shall bear the Engineer's stamp. All features shall comply with health and safety standards and the design shall be based on the following:

- a. Soil bearing value based on the subsurface investigation and foundation recommendations included in this Specification.
- b. Earthquake load designed by the fixed-percentage method for the calculation horizontal loads for Seismic Zone 3.
- c. Wind loads having a velocity of 100 mph.
- d. Foundations in accordance with recommendations of the "Subsurface Exploration and Foundation Recommendations" which is included in this Specification. Design shall be the responsibility of the Tank Contractor, including any additional testing, inspection, consultation, evaluation or verification by the soils engineer. Any concrete used in the foundation shall be Class A (3,500 psi) and shall have a minimum depth of bury of 3 feet.

11A-5. ELEVATED TANK.

The new elevated tank shall have a capacity of 500,000 gallons; shall be of the oblatoid type with a tubular steel column tower; and the invert of the overflow pipes shall be as shown on the detail plans. The head range of the tank shall be approximately 30 feet and the following tank accessories shall be included.

11A-5.1. Balcony and Railing.

A balcony with a minimum width of 24 inches and a trussed guardrail 42 inches high at the junction of the tank bottom and the sidewall shall be provided. An opening shall be provided in the outside balcony rail for access to the tower ladder and a stainless steel safety chain with clasp shall be provided to block the opening.

11A-5.2. Ladders.

All ladders shall be provided with a safety device meeting or exceeding OSHA requirements; shall have a minimum width of 16 inches as measured between the side rails; and shall have steps on approximately 12 inch centers. Ladders shall not have a backward slope and each rung shall be positioned so that it is not obstructed by supports, bracing, balcony rail or floor, etc.

The safety climbing device shall be of the rigid, notched rail type and shall be similar to SAF-T-CLIMB as manufactured by Norton Company, or equal. The device shall be installed in

accordance with the manufacturer's recommendations and the Contractor shall include all equipment, belts, locking mechanisms, etc., complete and ready for use by 1 climber.

A general description of each ladder required is as follows:

- a. Tower ladder, on 1 column, shall extend from approximately 8 feet above the ground to the balcony. The tower ladder shall be flush with the balcony rail and shall be constructed to step through the ladder onto the balcony rail. The safety climb device and 1 ladder side rail shall extend above the balcony rail.
- b. Outside tank and roof ladder shall extend from the balcony to the apex of the roof. Tank accessories such as roof hatch, obstruction light, etc., shall be accessible from the roof ladder.
- c. Inside tank ladders (3 required) shall be rigid and shall extend from the roof hatch and sidewall manhole to the bottom of the tank and from the top of the riser to the bottom of the riser. The ladders from the roof hatch and sidewall manhole to the bottom of the tank shall be supported to the sidewalls of the tank in at least two places.

11A-5.3. Security Ladder Guard.

The Contractor shall furnish and install a security ladder guard on the tower ladder. The ladder guard shall be of aluminum construction, shall be 6 feet long and shall be suitable for installation directly over the ladder climbing rungs to prevent unauthorized use. It shall have a lockable hasp and shall be similar to that manufactured by Cotterman Co. or RB Industries. It shall not have a one-piece piano hinge.

The ladder guard shall be installed so that the bottom of the guard is at least 18 inches above the bottom of the tower ladder and shall be mounted so that access to braces, struts, etc., is prevented. The guard shall also be of sufficient depth to be used in conjunction with the safety climbing equipment and fully cover the sides of the ladder to prevent access to the back side of the ladder. Insulators shall be used where required to prevent any dissimilar metals contact.

11A-5.4. Sidewall Manhole.

A manhole having a minimum opening of 24 inches in diameter shall be provided in the sidewall of the tank to provide direct access to the interior of the tank from the balcony. The manhole shall be removable from outside the tank and shall be properly sealed to prevent leaking.

11A-5.5. Roof Hatch.

A weatherproof hatchway with a minimum opening of 24 inches in diameter shall have a hinged cover and locking device and shall be constructed in the tank roof above the high water level.

11A-5.6. Roof Vent.

A roof vent, having a stainless steel insect screen, shall be near the apex of the roof and shall have sufficient area to prevent pressures caused by either filling or emptying the tank.

11A-5.7. Riser Pipe.

A riser pipe with a minimum diameter of 60 inches shall be supported on a reinforced concrete foundation having the same top elevation as the column foundations. The riser pipe

shall have a 24 inch minimum diameter manhole located approximately 3 feet above the top of the foundation for easy access to the riser from the ground. The manhole shall be removable from outside the tank and shall be properly sealed to prevent leaking. A 42 inch high handrail meeting OSHA requirements shall be constructed around the top of the riser pipe at the tension ring to prevent accidental entry. The riser pipe ladder and safety climbing device shall extend through the handrail.

11A-5.8. Pipe Connection.

A 12 inch connecting pipe shall extend from approximately 2 feet above the bottom of the larger riser down to the base elbow in a reinforced concrete chamber. The chamber shall be accessible from the top with a removable cover, and the 12 inch cast iron pipe shall extend through and outside of the chamber for connection to the service main. The pipe connection shall terminate in the riser with a removable silt stop or tee to prevent entry of foreign materials dropping from above.

11A-5.9. Overflow.

An 8 inch steel pipe with an appropriate intake or inlet shall extend down the outside of the tank shell and a tower column to a base elbow and shall be adequately supported at proper intervals throughout. The overflow pipe shall terminate at a point 10 feet from the tank foundation and shall discharge vertically to a concrete splash pad. It shall have a stainless steel insect screen and there shall be a 6 inch air gap between the end of the pipe and the splash pad.

11A-5.10. Obstruction Lights.

Obstruction lights shall conform with all requirements of the Kentucky Airport Zoning Commission and Federal Aviation Administration. All electrical work shall conform with the regulations of the National Electrical Code together with all local regulations and all materials shall be fully approved by and shall bear the label of an independent testing laboratory for the class of service intended. It shall be a duplex unit and shall be controlled by a photoelectric cell.

The conduit and wiring shall run down a tower column and terminate at a junction box approximately 5 feet above the ground.

11A-5.11. Anchor Bolt Gusset Plates.

Anchor bolt gusset plates shall be designed in such a manner as to facilitate blasting and painting of the back side of the anchor bolt. The minimum clearance around each anchor bolt shall be 2 inches.

11A-5.12. Signal Wire Conduit.

A 3/4 inch hot-dipped or sheradized, heavy wall, rigid conduit shall be installed from 12 inches above the balcony rail, down the Northwest tower column and terminate at a junction box 5 feet above the ground. The signal equipment and conductors shall be installed by the Owner.

11A-5.13. Drawings.

Each bidder shall furnish, with his bid, a drawing showing the dimensions of the tank and tower including the tank diameter, height to lower and upper capacity levels, the size of

principal members, and the thickness of plates in all parts of the tank and tower. Also, all accessories and their sizes shall be shown.

After award of the contract, 8 copies of the detailed drawings and foundation plans shall be submitted to the Engineer for review and the Owner's Record Plans.

11A-6. INSPECTION AND TESTING.

All inspection and testing of the tank shall be in accordance with Section 11 of AWWA D100. The field inspection shall be in accordance with Section 11.2 and a written report, in accordance with Section 11.2.1, certifying that the work was inspected as set forth, shall be submitted. All inspections and tests shall be made prior to painting.

11A-7. CATHODIC PROTECTION.

The elevated tank shall be equipped with fully automatic cathodic protection as manufactured by Harco Corporation, the same as other District tanks.

The rectifier unit shall be mounted on the panel board as shown on the Plans and housed in a weatherproof metal cabinet, adequately ventilated and with a provision for locking. It shall be equipped with indicating meters, input overload protection and a provision for manual adjustment of the output voltage.

It shall have an automatic controller to measure and maintain the minimum protective current requirements.

The anodes shall be of the nonsacrificial type and shall have a minimum life of 8 years. They shall be located to provide protection to all submerged surfaces of the tank and riser. All electrical work and materials (wiring, conduit, fittings, etc.) shall conform with the requirements of the National Electrical Code.

11A-7.1. Electrical Service.

The Tank Contractor shall be responsible for all electrical work associated with the cathodic protection and for connection of the rectifier unit to the 120/1/60 service. The Contractor shall be responsible for all inspections, permits, etc.

11A-7.2. Start-up.

The Contractor shall notify the Engineer at least three working days before initial start-up and adjustment of the equipment. The equipment representative shall instruct the Engineer and Owner of the proper operation, adjustments and maintenance of the equipment.

11A-7.3. Drawings.

Eight copies of all shop drawings, installation instructions, maintenance and operation instructions and drawings/specifications necessary for identification of parts shall be furnished to the Engineer for record documents.

11A-7.4. Cathodic Protection Guarantee.

The equipment manufacturer shall guarantee the adequacy of the design to provide the protective potentials required and his bid shall include maintenance service for a period of 2 years as follows:

- a. Annual inspection and check of the system.
- b. Service costs due to improper operation.

- c. Replacement and/or repair of all worn-out parts. Excepted from the provision is normal wear or ice damage to the anodes.
- d. Furnish 3 copies of an annual written report covering the inspection and any recommendations.

11A-8. DISINFECTION.

After completion of all tank work, including painting and before the tank is put into service, it shall be disinfected by the Tank Contractor in accordance with Specification 12.

11A-9. ELECTRICAL.

Electrical service to the tank site and a panel board for all electrical equipment shall be furnished by the Owner under Contract A. It shall be located as shown on the Plans.

The Contractor shall be responsible for connecting the obstruction lights and the cathodic protection to the panel board. The Owner shall connect all of the signal equipment.

The materials and equipment supplied shall be new and of the best quality used in commercial practice. Workmanship shall be of the highest grade throughout and in accordance with the best standard practice for the type material used.

The Contractor shall comply with all regulations of the National Electrical Code, together with all local rules, regulations, and ordinances relative to electrical work. All materials shall be fully approved by and shall bear the label of an independent testing laboratory (U.L., F.M., etc.) for the class of service intended.

The Contractor shall secure all permits, certificates and inspections required to comply with all laws and ordinances of local and State authorities. Fees, if any, shall be paid by the Contractor.

11A-10. TANK PAINTING.

Tank painting shall be in accordance with Specification 11B herein.

11A-11. TANK GUARANTEE.

The Contractor shall guarantee the structure against any defective materials or workmanship (including paint and painting) for a period of 1 year from the date of completion. If any materials or workmanship prove to be defective within 1 year, they shall be replaced and/or repaired by the Tank Contractor.

It shall be the Owner's option to employ a specialized Tank Inspector prior to the 1 year guarantee period to make this inspection and the Tank Contractor shall be given 2 weeks advance notice to be present, if desired.

11A-12. GENERAL CLEANUP.

All areas and locations of the work under this contract shall be left in a neat and clean condition. All debris, scrap, waste and other undesirable and objectionable material shall be completely removed from the site. All areas shall be restored and/or replaced to a condition equal to or better than conditions prior to construction and to the satisfaction of the property owner.

11A-13. LANDSCAPING.

The site shall be landscaped and seeded through Contract A in accordance with the Plans and Specification 14, "ASSOCIATED MISCELLANEOUS WORK".

11A-14. SCHEDULE.

Within 2 weeks of the Notice of Award, the Tank Contractor shall submit a progress schedule to the Engineer for approval. The schedule shall include the estimated dates for when the Contractor will begin and end (a) foundation work, (b) shop fabrication, (c) field erection of the tank, (d) installation of cathodic protection equipment, (e) connection to the water system, (f) testing, (g) painting, (h) disinfection, and (i) site work.

11A-15. EXISTING PEDESPHERE REMOVAL - GENERAL.

The work under this heading shall include all work associated with the removal of the Highway 121 pedesphere including dismantling and disposal of the metal tank, as well as:

a. **Piping.**

Remove existing valve to tank and plug tee at main on Kentucky Highway 121.

b. **Tank Foundation.**

Remove tank foundation to a minimum of 24 inches below the ground elevation.

c. **Electrical.**

Remove any electrical service from the meter to the tank and notify the power company to discontinue service.

d. **Site Work.**

Level, clean, landscape and seed site to a condition acceptable for farming and mowing.

GEOTECHNICAL ENGINEERING SERVICES REPORT

Proposed Water Tank
Hickory Water District
Graves County, Kentucky

PSI File No. 358-85155

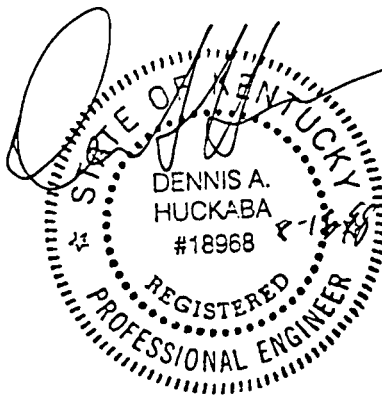
PREPARED FOR

Mr. Robert H. Sullivan
Hickory Water District
c/o Hunter Martin & Associates, Inc.
3220 Lone Oak Road
Paducah, Kentucky 42347

August 15, 1998

BY

PROFESSIONAL SERVICE INDUSTRIES, INC.



Handwritten signature of Dennis A. Huckaba.

Dennis A. Huckaba, P.E.
Department Manager
Geotechnical Services

Handwritten signature of Stanley W. Notestine.

Stanley W. Notestine, P.E.
Chief Engineer

PROFESSIONAL SERVICE INDUSTRIES, INC.
751 South Fifth Street
Nashville, TN 37206

11A-8

Telephone: (615) 244-8990
Fax: (615) 242-1618

TABLE OF CONTENTS

Page No.

PROJECT INFORMATION	1
• Project Authorization	1
• Project Description	1
• Purpose and Scope of Services	1
SITE AND SUBSURFACE CONDITIONS	2
• Site Location and Description	2
• Subsurface Conditions	2
• Groundwater Information	3
FOUNDATION RECOMMENDATIONS	4
CONSTRUCTION CONSIDERATIONS	5
• Drainage and Groundwater Concerns	5
• Excavations	6
REPORT LIMITATIONS	6
APPENDIX	
BORING LOCATION PLAN	
GENERAL NOTES	
BORING LOGS	

PROJECT INFORMATION

Project Authorization

Professional Service Industries, Inc. (PSI) has completed a geotechnical exploration for the proposed Water Tank in Graves County, Kentucky. Our services were authorized by Mr. Robert H. Sullivan of the Hickory Water District on July 23, 1998, by signing our proposal. This exploration was accomplished in general accordance with PSI Proposal No. 358-177 dated July 17, 1998.

Project Description

Project information was provided by Mr. Jerry Jones of Hunter Martin & Associates, Inc. on July 16, 1998. We have also been furnished with a drawing which depicts the location of the tank and foundations.

We understand the proposed construction will consist of a 500,000 gallon water storage tank and associated line work. The tank will be elevated approximately 160 feet. The tank will have 6 legs with a center riser. Loading information was not available. However, based on past experience with similar tanks, we estimate the tank legs will have about 550,000 lbs. of dead and live load and the riser will support approximately 1,500,000 lbs.

The geotechnical recommendations presented in this report are based on the available project information, water tank location, and the subsurface materials described in this report. If any of the noted information is incorrect, please inform PSI in writing so that we may amend the recommendations presented in this report if appropriate and if desired by the client. PSI will not be responsible for the implementation of its recommendations when it is not notified of changes in the project.

Purpose and Scope of Services

The purpose of this study was to explore the subsurface conditions at the site to enable an evaluation of acceptable foundation systems for the proposed construction. Our scope of services included drilling 3 soil test borings at the site to depths 30 feet and 50 feet, select laboratory testing, and preparation of this geotechnical report. This report briefly outlines the

testing procedures, presents available project information, describes the site and subsurface conditions, and presents recommendations regarding the following:

- - Foundation types, depths, allowable bearing capacities, and an estimate of potential settlement.
- - Comments regarding factors that will impact construction and performance of the proposed construction.

The scope of services did not include an environmental assessment for determining the presence or absence of wetlands, or hazardous or toxic materials in the soil, bedrock, surface water, groundwater, or air, on, or below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes.

SITE AND SUBSURFACE CONDITIONS

Site Location and Description

The site for the proposed Water Tank is located on the west side of U.S. Highway 45 within Industrial Park No. 3 in Graves County, Kentucky. The site for the proposed water tank was a soybean field at the time of drilling. The proposed tank area is situated on a small hill which slopes downward from the tank site in all directions. The area for the proposed tank is fairly level.

The surficial soils were firm at the time of the field exploration. Our truck drill rig experienced no difficulty in moving about the site.

Subsurface Conditions

The site subsurface conditions were explored with 3 soil test borings in the area of the proposed water tank. The boring locations were determined in conjunction with a representative of Hickory Water District and PSI. The borings were advanced utilizing hollow stem augers and soil samples were routinely obtained during the drilling process. Drilling and sampling techniques were accomplished generally in accordance with ASTM procedures.

Select soil samples were tested in the laboratory to determine material properties for our evaluation. Laboratory testing was accomplished generally in accordance with ASTM procedures.

Beneath about 8 inches of topsoil, lean to sandy clays were encountered to depths ranging from about 14 feet at borings B-2 and B-3 to about 19 feet at boring B-1. The clay contained rounded gravel at depths below about 9 feet. Standard penetration resistance N-values within these soils ranged from 4 to 42 blows per foot, indicating soil consistencies of soft to hard. The moisture content of these soils ranged from 21 to 26 percent. Unconfined compressive strengths, as measured by a calibrated pocket penetrometer, indicated that these clays have relative strength values ranging from 0.5 tsf to 4.5 tsf. The soils were visually classified as CL according to the Unified Soil Classification System.

Beneath the lean to sandy clay, sand and gravel was encountered to boring termination depths of 30 feet in boring B-3 and 50 feet in borings B-1 and B-2. Standard penetration resistance N-values within these soils resulted in penetration refusal indicating relative densities of very dense. The moisture content of these soils ranged from 4 to 10 percent. The soils were visually classified as SP according to the Unified Soil Classification System.

The above subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the appendix should be reviewed for specific information at individual boring locations. These records include soil descriptions, stratifications, penetration resistances, locations of the samples and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual. Water level information obtained during field operations is also shown on these boring logs. The samples which were not altered by laboratory testing will be retained for 60 days from the date of this report and then will be discarded.

Groundwater Information

The borings were dry upon completion of soil drilling, indicating that the continuous groundwater level at the site at the time of the exploration was either below the terminated depths of the borings, or that the soils encountered were relatively impermeable. Although groundwater was not encountered at this time, it is possible for a groundwater table to be present within the depths explored during other times of the year depending upon climatic and rainfall conditions. Additionally, discontinuous zones of perched water may exist within the overburden materials and/or at the contact with bedrock.

FOUNDATION RECOMMENDATIONS

Design Criteria

Based on the results of field and laboratory testing, drilled piers or footing foundations may be used to support the proposed tank. The pier shafts or footings can be dimensioned to exert a net allowable bearing pressure of up to 15 ksf on the stratum of very dense sand and gravel found at depths of about 14 to 20 feet below existing grade.

Drilled Piers:

Pier shafts should have a minimum diameter of 30 inches to facilitate entry for removal of loose materials and inspection of the bearing surface. The bottom of each pier should be leveled, cleared of loose material or other extraneous matter and dewatered as required before it is inspected. Each pier excavation should be observed by a representative of PSI to access that the foundation materials are capable of supporting the design loads and are consistent with the materials discussed in this report.

Temporary casing, which is removed when concrete is placed, will be required for protection of personnel, preventing collapsing of the overburden soil, and infiltration of any groundwater. Also, prior to entry by personnel, a safety harness and a gas/oxygen monitoring device will be required.

Concrete placed in the pier excavations should have a slump in the range of 5 to 7 inches to reduce the potential for the formation of voids as the temporary casing is extracted. The concrete mix should be designed to attain the required 28 day design strength when placed at this slump. The drilled piers should be filled with concrete as soon as practical to reduce the possibility of groundwater related problems which could occur.

When the drilling operations and inspections are complete, concrete should be placed inside the casing immediately. During simultaneous concrete placing and casing removal operations, sufficient concrete should be maintained inside the casing to offset the hydrostatic head of any groundwater outside the casing and prevent the intrusion of soil or groundwater outside the casing into the pier concrete.

Footing Foundations:

Footing excavations should be observed by a representative of PSI prior to steel or concrete placement to assess that the foundation materials are capable of supporting the design loads and are consistent with the materials discussed in this report. Soft or loosed zones encountered at the bottom of the footing excavations should be removed to the level of adequate bearing as directed by the geotechnical engineer. Cavities formed as a result of excavation of soft or loose zones should be backfilled with lean concrete.

After opening, footing excavations should be observed and concrete placed as quickly as possible to avoid exposure of the footings to wetting and drying. Surface run-off water should be drained away from the excavations and not allowed to pond. The foundation concrete should be placed during the same day the excavation is made. If it is required that footing excavations be left open for more than one day, they should be protected to reduce evaporation or entry of moisture.

General:

Based on the known subsurface conditions and laboratory testing and past experience, it is expected that potential settlement will be within tolerable limits. Estimation of overturning resistance for the tank foundation is beyond the scope of this exploration and should be evaluated by a structural engineer and/or tank designer.

Once the tank has been erected, it is recommended that it be initially filled in increments of 25 percent or less of the total capacity. The foundation should be monitored for settlement during these operations. If the rate of movement becomes excessive, loading should be halted and the geotechnical engineer notified.

CONSTRUCTION CONSIDERATIONS

PSI should be retained to provide observation and testing of construction activities involved in the foundations and related activities of this project. PSI cannot accept responsibility for any conditions which deviated from those described in this report, nor for the performance of the foundations if not engaged to also provide construction observation and testing for this project.

Drainage and Groundwater Concerns

While groundwater was not encountered at the time the field exploration was accomplished, it is possible that seasonal variations will cause fluctuations or a water table to be present in the upper soils at a later time. Additionally, perched water may be encountered in discontinuous zones within the overburden. Any water accumulation should be removed from excavations by pumping. Should excessive and uncontrolled amounts of seepage occur, the Geotechnical engineer should be consulted.

Excavations

In Federal Register, Volume 54, No. 209 (October 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR, part 1926, Subpart P". This document was issued to better insure the safety of workmen entering trenches or excavations. It is mandated by this federal regulation that excavations, whether they be utility trenches, basement excavations or footing excavations, be constructed in accordance with the new OSHA guidelines. It is our understanding that these regulations are being strictly enforced and if they are not closely followed, the owner and the contractor could be liable for substantial penalties.

The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations.

We are providing this information solely as a service to our client. PSI does not assume responsibility for construction site safety or the contractor's or other parties compliance with local, state, and federal safety or other regulations.

REPORT LIMITATIONS

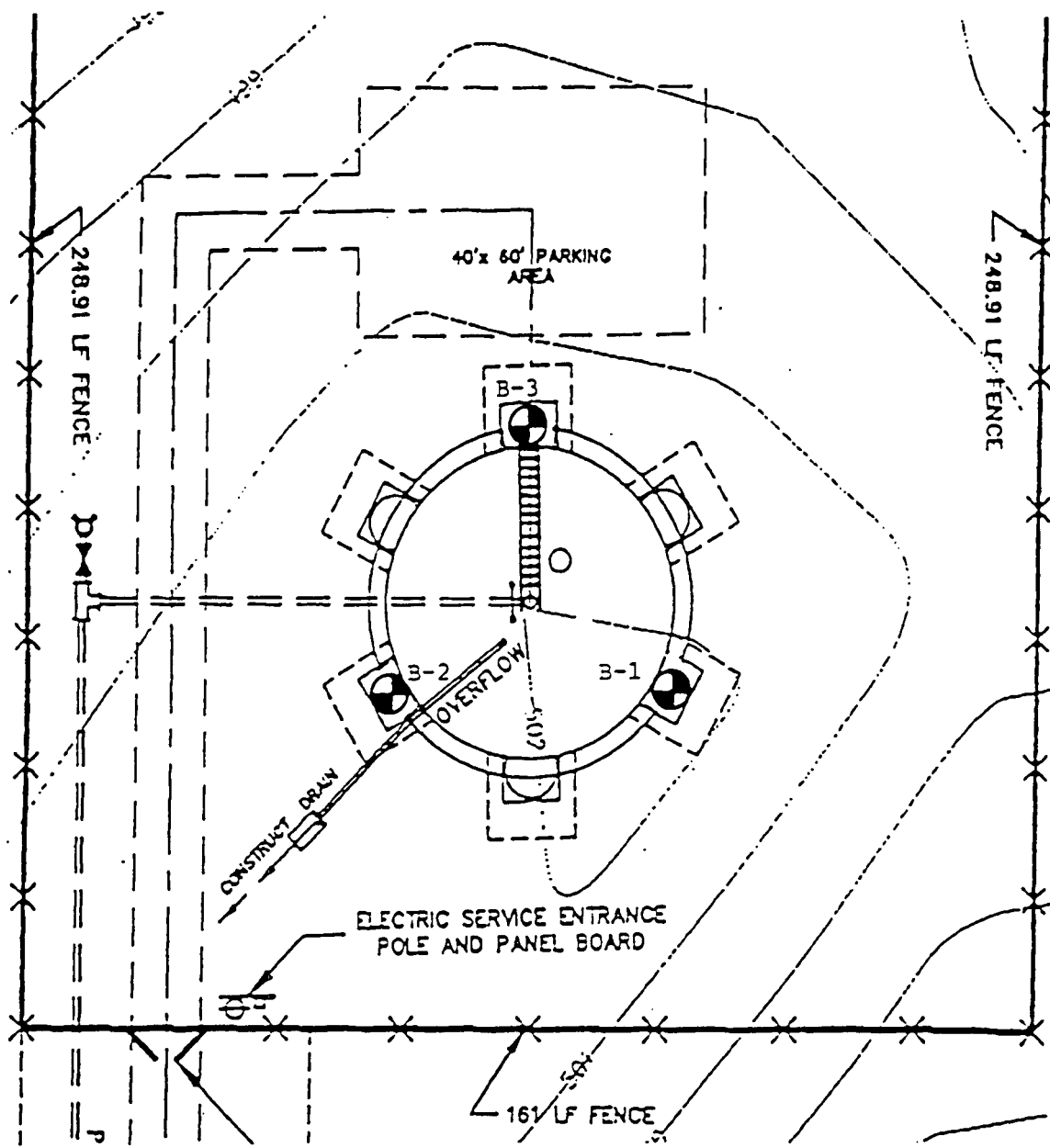
The recommendations submitted in this report are based on the available subsurface information obtained by PSI and design details furnished by Hunter Martin & Associates, Inc. for the proposed project. If there are any revisions to the plans for this project, or if deviations from the subsurface conditions noted in this report are encountered during construction, PSI should be notified immediately to determine if changes in the recommendations are required. If PSI is not notified of such changes, PSI will not be responsible for the impact of those changes on the project.

The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

After the plans and specifications are more complete, the geotechnical engineer should be retained and provided the opportunity to review the final design plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents. At this time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of Hickory Water District for the specific application to the proposed Water Tank in Graves County, Kentucky.

APPENDIX



0 30'
 PLAN SCALE
 (APPROXIMATE)



⊙ APPROXIMATE BORING LOCATION

BORING LOCATION PLAN
PROPOSED WATER TANK
 GRAVES COUNTY, KY

psi ENVIRONMENTAL
 GEOTECHNICAL
 CONSTRUCTION

DRAWN MH	SCALE NOTED	PROJ. NO. 358-85155
CHECKED DH	DATE AUGUST, 1998	PLATE 1

GENERAL NOTES

FINE AND COARSE GRAINED SOIL PROPERTIES

PARTICLE SIZE

BOULDERS:	GREATER THAN 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	4.74 mm to 75 mm
COARSE SAND:	2 mm to 4.75 mm
MEDIUM SAND:	0.425 mm to 2 mm
FINE SAND:	0.075 mm to 0.425 mm
SILTS & CLAYS:	LESS THAN 0.075 mm

COARSE GRAINED SOILS (SANDS & GRAVELS)

N-VALUE	RELATIVE DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
OVER 50	VERY DENSE

FINE GRAINED SOILS (SILTS & CLAYS)

N-VALUE	CONSISTENCY	Qu, PSF
0-2	VERY SOFT	0 - 500
3-4	SOFT	500 - 1000
5-8	FIRM	1000 - 2000
9-15	STIFF	2000 - 4000
16-30	VERY STIFF	4000 - 8000
OVER 31	HARD	8000+

STANDARD PENETRATION TEST (ASTM D1586)

THE STANDARD PENETRATION TEST AS DEFINED BY ASTM D1586 IS A METHOD TO OBTAIN A DISTURBED SOIL SAMPLE FOR EXAMINATION AND TESTING AND TO OBTAIN RELATIVE DENSITY AND CONSISTENCY INFORMATION. THE 1.4 INCH I.D./2.0 INCH O.D. SAMPLER IS DRIVEN 3-SIX INCH INCREMENTS WITH A 140 LB. HAMMER FALLING 30 INCHES. THE BLOW COUNTS REQUIRED TO DRIVE THE SAMPLER THE FINAL 2 INCREMENTS ARE ADDED TOGETHER AND DESIGNATE THE N-VALUE. AT TIMES, THE SAMPLER CAN NOT BE DRIVEN THE FULL 18 INCHES. THE FOLLOWING PRESENTS OUR INTERPRETATION OF THE STANDARD PENETRATION TEST WITH VARIATIONS.

BLOWS/FOOT (N-VALUE)

DESCRIPTION

25.....	25 BLOWS DROVE SAMPLER 12" AFTER INITIAL 6" SEATING
75/10"	75 BLOWS DROVE SAMPLER 10" AFTER INITIAL 6" SEATING
50/PR.....	SAMPLER ENCOUNTERED PENETRATION REFUSAL AFTER 50 BLOWS WITH NO PENETRATION
50/2".....	50 BLOWS DROVE SAMPLER 2" AFTER NO INITIAL 6" SEATING

KEY TO MATERIAL CLASSIFICATION

	TOPSOIL		LIMESTONE BEDROCK
	SOIL FILL MATERIAL		CRUSHED LIMESTONE
	CL LEAN CLAY		SANDSTONE
	CH FAT CLAY		SILTSTONE
	ML LOW PLASTIC SILT		SHALE
	MH HIGH PLASTIC SILT		GRAVEL
	SP POORLY GRADED SAND		SHOTROCK FILL
	SC CLAYEY SAND		ASPHALT
	SM SILTY SAND		CONCRETE

SOIL PROPERTY SYMBOLS

N:	STANDARD PENETRATION, BPF
M:	MOISTURE CONTENT, %
LL:	LIQUID LIMIT, %
PI:	PLASTICITY INDEX, %
Qp:	POCKET PENETROMETER VALUE, TSF
Qu:	UNCONFINED COMPRESSIVE STRENGTH, TSF
DW:	DRY UNIT WEIGHT, PCF

SAMPLING SYMBOLS

	UNDISTURBED SAMPLE
	SPLIT SPOON SAMPLE
	ROCK CORE SAMPLE
	AUGER OR BAG SAMPLE
	WATER LEVEL AFTER DRILLING
	WATER LEVEL AFTER 24 HRS

ROCK PROPERTIES

ROCK QUALITY DESIGNATION (RQD)

PERCENT RQD	QUALITY
90 to 100	EXCELLENT
75 to 90	GOOD
50 to 75	FAIR
25 to 50	POOR
0 to 25	VERY POOR

ROCK HARDNESS

VERY SOFT:	ROCK DISINTEGRATES OR EASILY COMPRESSES TO TOUCH; CAN BE HARD TO VERY HARD SOIL.
SOFT:	ROCK IS COHERANT BUT BREAKS EASILY TO THUMB PRESSURE AT SHARP EDGES AND CRUMBLES WITH FIRM HAND PRESSURE.
MODERATELY HARD:	SMALL PIECES CAN BE BROKEN OFF ALONG SHARP EDGES BY CONSIDERABLE HARD THUMB PRESSURE; CAN BE BROKEN BY LIGHT HAMMER BLOWS.
HARD:	ROCK CANNOT BE BROKEN BY THUMB PRESSURE, BUT CAN BE BROKEN BY MODERATE HAMMER BLOWS.
VERY HARD:	ROCK CAN BE BROKEN BY HEAVY HAMMER BLOWS.

BORING LOG

Project: **Proposed Water Tank** PSI No.: **358-85155** Date: **8/4/98**
 Location: **Graves County, KY**

Boring No.: **B-1** Total Depth **50.5'** Elev: Water at Completion of Soil Drilling: **Dry**

Boring Method: **Hollow Stem Auger** Drill Type: **CME-55** Driller: **Bob**

Elevation (MSL)	Depth (feet)	Sample	DESCRIPTION OF MATERIALS	N	N VALUE (bpf) ▲										% M	LL	PI	Qp	Qu	UDW
					10	20	30	40	50	60	70	80	90							
	0.6		8" TOPSOIL																	
	2.0		Brown Lean CLAY with trace roots, moist, firm. (CL)	6													23			2.0
			Brown Lean CLAY, moist, very stiff. (CL)	18													22			4.0
				17													24			1.5
				20													23			2.0
	9.0		Brown Sandy CLAY with rounded gravel, hard. (CL)	50/PR													22			3.0
				50/PR													20			2.5
	19.0		Reddish Brown Fine to Course Grained SAND and GRAVEL, slightly moist, very dense. (SP)	50/PR													4			
				50/PR													7			
				50/PR													4			
				50/PR													7			

NV 85155 8/13/98

BORING LOG

Project: Proposed Water Tank					PSI No.: 358-85155					Date: 8/4/98											
Boring No.: B-1					Total Depth: 50.5'					Elev:					Water at Completion of Soil Drilling: Dry						
Boring Method: Hollow Stem Auger					Drill Type: CME-55					Driller: Bob											
Elevation (MSL)	Depth (feet)	Sample	DESCRIPTION OF MATERIALS	N	N VALUE (bpf) ▲										% M	LL	PI	Qp	Qu	UDW	
					10	20	30	40	50	60	70	80	90								
		X		50/PR																	
		X	Reddish Brown Fine to Course Grained SAND and GRAVEL, slightly moist, very dense. (SP)	50/PR																	
	50.5	X	Boring Terminated at 50.5 Feet	50/PR																	

NV 85155 8/13/98

BORING LOG

Project: Proposed Water Tank			PSI No.: 358-85155	Date: 8/4/98	
Boring No.: B-2			Location: Graves County, KY		
Total Depth: 50.5'	Elev:		Water at Completion of Soil Drilling: Dry		
Boring Method: Hollow Stem Auger		Drill Type: CME-55	Driller: Bob		

Elevation (MSL)	Depth (feet)	Sample	DESCRIPTION OF MATERIALS	N	N VALUE (bpf) ▲																	
					10	20	30	40	50	60	70	80	90	% M	LL	PI	Qp	Qu	UDW			
	0.6		8" TOPSOIL																			
	2.0		Brown Lean CLAY with trace roots, moist, stiff. (CL)	9														26				1.5
			Brown Lean CLAY, moist, stiff to soft. (CL)	7														24				3.0
				11														22				2.5
				4														23				0.5
				6														25				1.5
	14.0		Reddish Brown Fine to Course Grained SAND and GRAVEL, slightly moist, very dense. (SP)	50/PR														4				
				50/PR														8				
				50/PR														7				
				50/PR														7				
				50/PR														7				

NV 85155 B/13/98

BORING LOG

Project: Proposed Water Tank						PSI No.: 358-85155		Date: 8/4/98													
						Location: Graves County, KY															
Boring No.: B-2		Total Depth 50.5'		Elev:		Water at Completion of Soil Drilling: Dry															
Boring Method: Hollow Stem Auger			Drill Type: CME-55			Driller: Bob															
Elevation (MSL)	Depth (feet)	Sample	DESCRIPTION OF MATERIALS	N	N VALUE (bpf) ▲										% M	LL	PI	Qp	Qu	UDW	
					10	20	30	40	50	60	70	80	90								
		X		50/PR																	
		X	Reddish Brown Fine to Course Grained SAND and GRAVEL, slightly moist, very dense. (SP)	50/PR																	
	50.5	X	Boring Terminated at 50.5 Feet	50/PR																	

NV 85155 8/13/98

BORING LOG

Project: Proposed Water Tank	PSI No.: 358-85155	Date: 8/4/98
Location: Graves County, KY		

Boring No.: B-3	Total Depth 30.5'	Elev:	Water at Completion of Soil Drilling: Dry
Boring Method: Hollow Stem Auger		Drill Type: CME-55	Driller: Bob

Elevation (MSL)	Depth (feet)	Sample	DESCRIPTION OF MATERIALS	N	N VALUE (bpf) ▲										% M	LL	PI	Qp	Qu	UDW		
					10	20	30	40	50	60	70	80	90									
	2.0		TOPSOIL	7													25			1.0		
			Brown Lean CLAY, moist, stiff to soft. (CL)	15													24			3.0		
				8													25			1.5		
	9.0		Brown Sandy CLAY with rounded gravel, moist, hard. (CL)	4													25			2.5		
				42													21			4.0		
	14.0		Reddish Brown Fine to Course Grained SAND and GRAVEL, slightly moist, very dense. (SP)	50/PR													10					
				50/PR													8					
				50/PR													9					
	30.5		Boring Terminated at 30.5 Feet	50/PR													8					

NV 85155 8/13/98

SPECIFICATION 11B

WATER STORAGE TANK PAINTING

11B-1. SCOPE.

This Specification is a technical description of the materials, equipment, construction systems, the standards and workmanship for work applying to water storage tank painting and related appurtenances complete and ready for use. All materials, design and work shall conform with AWWA D102 for painting. Reference is also made to standards and codes published by ASTM, and SSPC and shall be of like import.

Wherever materials are specified herein by using the proprietary product of a particular manufacturer or vendor, it is to establish a standard of quality and appearance. Acceptance or approval of a substitute is only for conformance with the design concept and does not relieve the Contractor of his responsibility for the satisfactory performance of the product.

11B-2. PAINTING.

Painting of the elevated tank, for protection as well as for appearance, is of primary importance and only first class workmanship and materials shall be acceptable. All aspects of the tank painting, including surface preparation, paint systems, application methods, safety, etc., shall be in compliance with all sections of AWWA D102 and in accordance with applicable State and Federal Regulations. In addition to the AWWA Standards, the paint manufacturer's recommendations and instructions shall be followed.

Painting of the structure shall include all structural supports, ladders, catwalks, platforms, cages, cross-bracing, support cables and rods, turnbuckles, anchor plates, nuts, bolts, electrical boxes, conduit, pipe handrails, foundations, and all other exposed miscellaneous metal attached to, or connected with, said structures unless expressly omitted by the Engineer.

Signal lights shall be kept in operation at all times, and the Contractor shall exercise all precautions to prevent interruption of service or damage to any electrical apparatus.

No holes shall be made in any section of the tank to secure rigging. Equipment may be fastened to the tank using existing rigging holes or weld-on clip angles only.

11B-2.1. SURFACE PREPARATION.

All surfaces scheduled for painting shall be properly cleaned and prepared in accordance with the Specifications and manufacturer's recommendations.

Before blasting, the Contractor shall remove all grease, wax, oil, salt, chemicals, dust, and similar contaminants, as required, by solvent cleaning in conformance with the Steel Structures Painting Council, Surface Preparation No. 1 (SSPC-S1).

The abrasive unit for blast cleaning shall be DuPont Star Blast..

Blast-cleaning equipment shall be of the conventional forced-fed or pressure type. The air supply shall be sufficiently free of oil and moisture such that no visible oil or moisture appears on the blasted surface. Only the dry blasting method may be used.

After blasting, all abrasive, dust, and grit shall be removed with a vacuum cleaner, compressed air (clean and dry) or a clean brush.

Not blasted surface shall be left unprimed longer than five hours and at no time shall it be left unprimed overnight without reblasting before coating.

a. Interior.

Following cleaning, the interior of the tank shall be prepared by removing all rust, scale, old paint, and other debris by blasting. The Contractor shall blast the entire interior surface to bare metal conforming with SSPC-SP-10 (near white metal blast). The blast profile shall be 1.5 to 2.5 mils maximum.

b. Exterior.

Following cleaning, as required, the exterior of the tank shall be prepared by blasting all surfaces in conformance with SSPC-SP-6 (commercial blast) prior to the application of the specified primer. The blast profile shall be 1 to 1-1/2 mils maximum.

c. Foundation.

As specified, brush-off cleaning shall be performed in conformance with SSPC-SP-7 prior to the application of the specified primer.

11B-2.2. PAINT - GENERAL.

All paint shall be of the highest quality and shall be the product of one paint manufacturer of known integrity; i.e., Tnemec Company, Noco, DuPont, Kop Koat, Ameron, etc. The manufacturer shall have been in business for at least five years and shall have successfully supplied paint for a minimum of five tank painting jobs within the past three years. A list shall be furnished upon request including contacts, phone numbers, size, etc.

The materials for interior paint systems shall have been evaluated for long-term fresh water resistance, and shall have demonstrated satisfactory service in fresh water for 18 months.

All paint systems shall meet or exceed AWWA Standards and shall be a system approved by State and Federal Regulations for use with potable water.

The Contractor shall furnish with the submittal drawings the name of the paint manufacturer to be used; the product information, as outlined in Section 4 of AWWA D102, for the particular system selected (mixing instructions, thinning rates, per cent solids, spreading rate, weight, drying time, pot life, safety, etc.); the application method to be used; and the manufacturer's certification that the paint system to be used is in accordance with all applicable standards; and the Material Safety Data Sheets (MSDS) for the product.

All paint shall be brought to the site in original sealed containers and shall be labeled with the manufacturer's name, distinctive product name or number, and lot number.

Paint materials and equipment shall be stored in such places as may be approved by the Engineer. The Contractor shall maintain the storage area and leave it free from fire hazards due to improperly stored rags, waste or other combustible materials.

All paints shall be thoroughly mixed to achieve a complete blending of the entire contents of the container before use. Additional stirring of the material shall be repeated, as required, during application thereof to prevent separation of the pigment and vehicle.

11B-2.3. PAINT SYSTEMS.

On this job, the following paint systems shall apply:

a. Interior.

The interior of the tank shall receive a three coat high solids epoxy paint system suitable for potable water having a total dry film thickness of 12.0 to 18.0 mils.

Either prior to the primer coat or to the intermediate coat, the Contractor shall brush coat all welds, pits, ladders and rough areas on the tank interior with a mixture containing approximately 50 per cent thinner and 50 per cent primer. This is required to help assure a holiday free coating.

The prime coat shall be similar to Tnemec Series 140-1255 Pota-Pox Plus having a dry film thickness of 4.0 to 6.0 mils.

The intermediate coat shall be similar to Tnemec Series 140-WH01 Pota-Pox Plus having a dry film thickness of 4.0 to 6.0 mils.

The finish coat shall be similar to Tnemec Series 140-WH02 Pota-Pox Plus having a dry film thickness of 4.0 to 6.0 mils.

Tnemec Series 44-700 Epoxy Accelerator may be used when the air, material or surface temperature is anticipated to be between 35°F and 60°F during application and/or curing.

b. Exterior.

The exterior surfaces of the tank shall be coated with a system consisting of three coats having a total dry film thickness of 7.5 to 10 mils.

The first coat shall be a rust-inhibitive, epoxy-polyamide similar to Tnemec Series 65-1212, Poxiprime having a dry film thickness of 2.5 to 3.0 mils. Tnemec Series 160-1212, Tnemec-Fasprime may be used in lieu of Series 65-1212, Poxiprime when the air, material or surface temperature is anticipated to be between 35°F and 60°F during application and/or curing.

The intermediate coat shall be an epoxy-polyamide coating similar to Tnemec Series 27-Color F.C., Typoxy. The color shall be varied slightly from that of the prime coat and the final coat. The dry film thickness of this coat shall be 2.0 to 3.0 mils.

The final coat shall be high-build acrylic polyurethane gloss exterior enamel similar to Tnemec Series 74-Color, Endura-Shield. The dry film thickness of the final coat shall be 2.0 to 4.0 mils. Tnemec Series 44-710 Urethane Accelerator may be used when the air, material or surface temperature is anticipated to be between 35°F and 60°F during application and/or curing.

The color shall be selected by the Owner from color charts furnished by the Contractor.

After the final coat is dry, the name shall be placed on the tank in 1 location. The name shall be centered for reading from U. S. Highway 45. The letters shall be gothic-style approximately 3-1/2 feet high and shall be near the top of the vertical side of the tank. Shop drawings shall include a detail showing the height, width, spacing and stroke width of the lettering; an elevation showing the name position; and a plan showing the length (wraparound) of the name.

Lettering shall be two coats of black paint being the same as the tank exterior finish coat and having a dry film thickness of 2.0 to 4.0 mils. It shall read:

**MAYFIELD-GRAVES CO. INDUSTRIAL PARK NO. 3
HICKORY WATER DISTRICT**

c. Foundations.

The foundations shall be painted with a paint system identical to that specified for the tank exterior and the color shall match the tank exterior.

11B-2.4. APPLICATION.

The requirements of SSPC-PA1 shall be followed with regard to storage of paint and thinner, mixing, thinning, painting, application and drying. The particular method of application shall conform to the manufacturer's recommendations and to the site conditions.

Prime coats shall be applied immediately after surface preparation (within 5 hours as specified) and before any surface rusting occurs. Priming of interior surfaces shall be by brushing or spraying. For exterior surfaces, the primer may also be applied by rolling.

The Contractor shall mix, thin, and apply each coating at the rate and in the manner specified by the manufacturer. If material has thickened or must be thinned for application by spray gun, the coating shall be built up to the same film thickness achieved with undiluted material. Deficiencies in film thickness shall be corrected by the application of an additional coat of paint.

No paint shall be applied when the temperature of the surface to be painted is below 50 degrees F. Paint shall not be applied to wet or damp surfaces, and shall not be applied in rain, snow, fog, or mist or when relative humidity exceeds 85 per cent. Air and surface temperatures shall be within the limits prescribed by the manufacturer for the coating being applied and the work area shall be reasonably free of airborne dust at the time of application and while coating is drying.

No paint shall be applied when it is expected that the relative humidity will exceed 85 per cent or that the air temperature will drop below 40 degrees F within 18 hours after the application of the paint. Dew or moisture condensation should be anticipated and if such conditions are prevalent, painting shall be delayed until midmorning to be certain the surfaces are dry. The day's painting shall be completed well in advance of the probable time of day when condensation will occur to permit the film of an appreciable drying time prior to the formation of moisture. Finish coats shall be uniform in color and sheen without streaks, laps, runs, sags, or missed areas.

Each coat shall be allowed to sufficiently dry before applying the next coat. Adequate ventilation, which will effectively remove solvents, shall be provided for proper drying of paints on interior tank surfaces. A minimum of seven days following the application of the final coat on the interior surfaces shall be allowed before the tank is flushed, sterilized, or filled with water.

11B-2.5. EQUIPMENT.

All paint application equipment to be used shall be subject to approval by the Engineer to insure it is capable of applying the paint in accordance with this Specification.

Paints shall be applied by any of the following methods: (a) air spray application for any coat, (b) airless spray application for any coat (preferable), (c) brush application, or (d) roller, if recommended by the manufacturer and if required for site conditions.

11B-2.6.**INSPECTION AND TESTING.**

All work and materials shall be subject to inspection and approval by the Engineer or his authorized representative. All phases of the work shall be accessible and any deficiencies shall be corrected by the Contractor before proceeding to the next phase. The Engineer shall be notified 24 hours in advance, as required, so that the following visual inspections can be made and the Contractor shall not proceed to the next phase until approved by the Engineer.

- a. After interior surface preparation and before any field primer coats are applied.
- b. After exterior surface preparation and before any field primer coats are applied.
- c. After field primer coats are applied and before any intermediate coats are applied.
- d. After all painting has been completed and is ready for holiday testing and testing of dry film thickness.

The Engineer shall be notified 24 hours in advance of all testing so that he may be present. The Contractor shall furnish and have at the job site at all times a mil thickness gauge (Mikrotest or Elcometer) and a 67.5 volt holiday detector. The equipment shall be in good working order and properly calibrated.

Testing shall be conducted in accordance with Section 8 of AWWA D102 and upon completion of the test, a written report shall be submitted as specified therein.

In addition to the measurement of the wet film thickness of each coat as it is being applied, the dry film thickness of the entire system shall be measured. In both cases, as many measurements as feasible shall be made so that there is approximately one measurement for each 100 square feet of surface area painted and at locations directed by the Engineer. Extensive re-rigging, after the paint has dried, is not required provided that a sufficient number of locations tested exceed the minimum specified.

All interior surfaces below the overflow shall be tested with a wet sponge low-voltage holiday detector after the paint has cured for at least 5 days. All interior rigging shall be left in place until the coating system has passed the holiday test.

11B-2.7.**CLEANUP.**

After all painting has been completed in accordance with the Specifications, the inside of the tank shall be carefully and thoroughly cleaned. Also, the tank site shall be cleaned up and restored to a condition at least equal to that prior to the beginning of the work.

11B-3. DISINFECTION.

After completion of all tank work, including painting and before the tank is put into service, it shall be disinfected by the Contractor in accordance with Specification 12.

11B-4. GUARANTEE.

The Contractor shall guarantee the work against any defective materials or workmanship (including paint and painting) for a period of one year from the date of completion. If any materials or workmanship prove to be defective within one year, they shall be replaced and/or repaired by the Contractor.

SPECIFICATION 12

TESTING AND DISINFECTING

12-1. SCOPE.

The work under this Specification consists of testing and disinfecting of all water mains and appurtenances, plant equipment, pumping facilities, and storage facilities. Testing and disinfection shall be done by the CONTRACTOR in the presence of the ENGINEER. The cost of testing and disinfecting (including water, chemicals, equipment, etc.) shall be included in the unit and/or lump-sum prices bid. No additional payment shall be made for performance of these items.

12-2. TESTING.

All testing shall be done at the CONTRACTOR'S expense and in accordance with AWWA Standards and manufacturers' recommendations, unless otherwise specified. Any defects in materials or workmanship shall be corrected and retesting shall be at the CONTRACTOR'S expense.

12-2.1. DISTRIBUTION SYSTEM AND APPURTENANCES.

Hydrostatic tests shall be performed on all newly laid pipe and shall consist of a pressure and leakage test. The test shall be run before disinfection and before making service connections. The CONTRACTOR shall furnish the water, pump, piping, meters, connections, and all the necessary apparatus and labor to conduct the test. All pipe shall be tested in accordance with AWWA C600 unless otherwise specified.

Hydrostatic tests shall be performed between all valved and end sections; on shorter sections where practical; and as required to meet the test restrictions contained herein. The test shall be run only after concrete blocking has properly cured (5 days for regular cement and 2 days for high-early strength cement). All fittings, hydrants, plugs, etc., shall be properly blocked and protected.

The testing method described in this section is specific for water pressure testing and is not to be applied for air pressure testing due to the serious safety hazards involved.

a. Test Restrictions.

1. The test pressure, as measured at the point where the highest pressure occurs during normal operation, shall be at least equal to the maximum pressure rating of the pipe.

For systems using different classes of pipe, a separate test shall be run on each section at the respective pressure rating of the pipe being tested. The CONTRACTOR may, at his option and risk, test different sections of pipe simultaneously provided the higher test pressure is used and all other conditions are met.

2. The duration of the test shall be at least 2 hours.
3. The test pressure shall not vary more than 5 psi for the duration of the test.
4. The test pressure shall not exceed the pipe or thrust-restraint design pressures nor be more than twice the rated pressure of the valves or hydrants.

b. Pressurization.

Initial filling of the main to be tested shall be at a rate such that the velocity in the main does not exceed 1 fps. The CONTRACTOR shall take great care to assure that all air is expelled from the main. Where air vents are not located at high points, corporation stops shall be installed as required to expel the air during the filling process. After completion of the test, the corporation stops shall be removed at the discretion of the ENGINEER or used for service line connections, if practical.

Pressurization of the main shall begin only after the main is completely filled with water and all air is removed. Pressure shall be applied through a corporation stop set by the CONTRACTOR. Testing shall not begin until the test pressure has stabilized.

c. Examination.

All exposed pipe, fittings, valves, hydrants, joints, etc., shall be examined during the test. Any visible leaks or defects shall be corrected despite the results of the leakage test and the test shall be repeated until it is satisfactory to the ENGINEER.

d. Leakage.

Leakage is defined as the amount of water that must be added to the test section to maintain the test pressure. The duration of the test shall be 2 hours. At the end of the test, the Contractor shall meter and record accurately the amount of water required to restore the test pressure in the section being tested. The allowable leakage shall be determined by the following formula:

$$L = S \cdot D \cdot [P^{0.5}] / 133,200$$

Where,

L	=	Allowable leakage, in gallons per hour
S	=	Length of the test section, in feet
D	=	Diameter of the pipe being tested, in inches
$P^{0.5}$	=	Square root of the average test pressure

If the test shows any section with leakage greater than the allowable, the leak shall be located and repaired and the section retested.

12-2.2. OTHER TESTS.

Other tests, as required for equipment, storage facilities, etc., shall be conducted in accordance with the applicable specifications.

12-3. DISINFECTION.

All existing facilities exposed to possible contamination and all new facilities shall be thoroughly disinfected and tested for the absence of coliform organisms before placing or replacing into service. All disinfection shall be with chlorine or chlorine compounds in such amounts as to produce a concentration of at least 50 mg/l and a residual of at least 25 mg/l at the end of 24 hours.

Disinfection shall be in accordance with State Regulations.

12-3.1.

GENERAL.

The general procedure for disinfection is outlined as follows:

- a. The CONTRACTOR shall prevent any contaminating materials from coming into contact with the facilities by utilizing good construction procedure.
- b. The CONTRACTOR shall remove all possible contaminating materials by flushing or other means.
- c. The CONTRACTOR shall chlorinate any residual contamination that may remain and dispose of the chlorinated water.
- d. The CONTRACTOR shall determine the bacteriological quality of the water through certified laboratory testing.

12-3.2.

FORMS OF CHLORINE.

The forms of chlorine that may be used in the disinfection process are liquid chlorine, sodium hypochlorite solution, and calcium hypochlorite granules or tablets. The procedure for use and handling of the chlorine shall be in strict compliance with all AWWA and applicable safety standards.

Liquid chlorine contains 100 per cent available chlorine and is produced by mixing chlorine gas with water and injecting the solution into the facilities being disinfected. Direct feed of chlorine gas into the main shall not be permitted.

Sodium hypochlorite is in liquid form and contains approximately 5 to 15 per cent available chlorine. It is fed into the facilities by hand-pouring and mixing with the incoming water or by pumping a solution of known strength into the facilities.

Calcium hypochlorite is in either granular or tablet form and contains approximately 65 per cent available chlorine by weight. It is fed into the facilities by hand-pouring or pumping as described above. One pound of calcium hypochlorite added to 8.5 gallons of water produces a 1 per cent solution.

12-3.3.

PREVENTIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION.

It is essential that the facilities are thoroughly clean prior to disinfection and good construction procedures shall be used.

If, in the opinion of the ENGINEER, it appears that all dirt and debris cannot be removed hydraulically, the facilities shall be mechanically cleaned and swabbed with a 1 per cent hypochlorite disinfecting solution.

In cases of pipe contamination by flooding during installation, the main shall be flushed until clean and disinfected so that a 25 mg/l solution is maintained at the end of a 24 hour period. After cleaning and disinfecting, construction may resume.

Two methods of disinfecting mains are offered and the CONTRACTOR shall be responsible for selecting the method best suited for the conditions encountered.

a. Preliminary Flushing.

Preliminary flushing to remove visible evidence of contamination shall be at a rate to produce a velocity of 2.5 fps within the main unless it is determined by the ENGINEER that conditions do not permit the flow. As a guide, Table 12-1 shows the required flow and number of openings to produce a flushing velocity of 2.5 fps in various size mains at 40 psi residual pressure. It shall be the CONTRACTOR'S responsibility to verify the rate required for the actual field conditions.

Pipe Diameter Inches	Flow Required To Produce 2.5 fps Velocity in Main GPM	TYPE OF DISCHARGE OUTLET		
		Size of Main,** Tap On Inches	Hydrant Outlets	
			Number	Size, Inches
4	100	0-15/16	1	2-1/2
6	220	1-3/8	1	2-1/2
8	390	1-7/8	1	2-1/2
10	610	2-5/16	1	2-1/2
12	880	2-13/16	1	2-1/2
16	1,565	2-5/8	2	2-1/2

* With a 40 psi pressure in the main with the hydrant flowing to atmosphere, a 2-1/2 inch hydrant outlet will discharge approximately 1,000 GPM. A 4-1/2 inch hydrant outlet will discharge approximately 2,500 GPM.

** Size of tap on main, with no significant length of discharge piping.

b. Methods of Application.

All sections being disinfected shall be properly valved or otherwise disconnected to prevent the strong chlorine solution from entering the mains in active service. All valves and hydrants within the section shall be operated to assure contact with the disinfectant.

Two acceptable methods of application are as follows:

1. Tablet Method.

This method may be used only when the pipes and appurtenances are kept clean and dry during construction and for mains smaller than 24 inches in diameter. It shall not be used on solvent welded plastic or screwed joint steel pipe.

Under this method, hydrostatic tests will be run while disinfection is taking place. If any leaks are detected and the main is either partially or completely drained to make the necessary repairs, the CONTRACTOR shall start the disinfection over using the continuous feed method.

During construction, 5-g calcium hypochlorite tablets shall be placed in each section of pipe and one tablet in each hydrant, hydrant branch and other appurtenances. The number of tablets to place in each pipe section shall be sufficient to produce a concentration of 50 mg/l. As a guide, Table 12-2 is presented. The tablets shall be attached to the inside top of the pipe with an adhesive such as Permatex No. 1 or equal.

Pipe Diameter, Inches	Length Of Pipe Section				
	13 Feet or Less	18 Feet	20 Feet	30 Feet	40 Feet
4	1	1	1	2	2
6	2	2	2	3	4
8	2	3	3	5	6
10	3	5	5	7	9
12	5	6	7	10	14
16	8	12	14	20	26

Preliminary flushing of the main is eliminated for this method. The mains shall be filled as specified herein and chlorinated water shall remain in the main for 24 hours unless the water temperature is less than 41 degrees Fahrenheit, in which case the contact time shall be extended to 48 hours. After the required contact time, and verification of the 25 mg/l residual, final flushing of the main shall take place as specified.

2. Continuous Feed Method.

This method is suitable for general applications. Initial filling, testing and preliminary flushing shall be in accordance with the procedures previously set forth.

The main shall be refilled at a constant measured rate while injecting chlorinated solution into the main at a point no further than 10 feet downstream from the beginning. The chlorine shall be continuously fed into the main at a constant rate such that the water in the main has a concentration of at least 50 mg/l free chlorine. Measurements shall be taken at regular intervals along the new main to assure that this concentration is maintained. The contact time shall be 24 hours and the free chlorine residual at the end of the contact period shall not be less than 25 mg/l as specified. After verification of the residual, final flushing may take place.

Table 12-3 gives the amount of chlorine required to produce 50 mg/l in 100 feet of pipe for the diameters shown.

TABLE 12-3
 CHLORINE REQUIRED TO PRODUCE 50 mg/l
 CONCENTRATION IN 100 FEET OF PIPE BY DIAMETER

Pipe Diameter Inches	100 Per Cent Chlorine Pounds	1 Per Cent Chlorine Solution Gallons
4	.027	0.33
6	.061	0.73
8	.108	1.30
10	.170	2.04
12	.240	2.88
16	.435	5.20

12-3.5. MISCELLANEOUS DISINFECTION.

All cutting into or repairing of existing mains and all pumps, valves and appurtenances in a treatment plant, coming into contact with a potable water, shall be thoroughly cleaned and then shall be swabbed or sprayed with a 1 per cent hypochlorite solution before installation. Flushing, the most practical means of removing contamination introduced during repairs, shall be started when the repairs are completed and shall be continued until discolored water is eliminated.

12-3.6. DISINFECTION OF STORAGE FACILITIES.

Two methods of disinfecting storage facilities are offered and it shall be the CONTRACTOR'S responsibility to select the method best suited for the conditions.

a. Method 1.

For this method, the storage facility shall be slowly filled to the overflow with potable water to which enough chlorine has been added to provide a concentration of at least 50 mg/l and a residual of 25 mg/l at the end of the 24 hour contact period. The chlorine shall be introduced into the water as early during the filling operation as possible. Approximately 60 pounds of high test hypochlorite will produce 50 mg/l in 100,000 gallons of water.

After verification of the residual, the facility may be flushed as specified herein.

b. Method 2.

For this method, a solution of 250 mg/l available chlorine shall be applied directly to all surfaces of the storage facility that come in contact with the potable water including inlet piping. The solution shall be applied with suitable brushes or spray equipment and the necessary safety precautions shall be taken.

The spraying procedure shall be repeated within 1 hour of completion of the initial spraying. After completion of the second spraying and within 30 minutes of completion, the tank shall be drained and the filling procedure started.

12-3.7. FINAL FLUSHING.

After the specified contact time and after verification of the chlorine residuals, the heavily chlorinated water shall be flushed from the system. Flushing shall be done in a manner to protect the environment and the chlorinated water shall be neutralized with a reducing agent, if necessary. Water remaining in the main or storage facilities shall have a chlorine concentration no higher than that generally prevailing in the system but no less than 1 mg/l.

12-3.8. BACTERIOLOGICAL TESTS.

After final flushing, and before the new main is placed in service, a sample or samples shall be collected from the ends of the lines and tested by an approved laboratory to show the absence of coliform organisms. The results shall conform with the applicable State Standards. State Regulations regarding the method of collecting samples, the number of samples required and any other conditions, more stringent than those specified, shall prevail.

The ENGINEER shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

12-3.9. REDISINFECTION.

If the initial disinfection fails to produce satisfactory results, the facility shall be reflashed and resampled. If the additional samples reveal contamination, the facility shall be drained and rechlorinated. At the CONTRACTOR'S discretion, samples of the water entering the facility may be tested as well.

S

AINS)

INDEX

TITLE

- VER
- ERALL DISTRIBUTION SYSTEM
- S. HWY 45 SUPPLY MAIN AND INDUSTRIAL PARK IMPROVEMENTS
- EVATED TANK SITE PLAN AND SCCELLANEOUS DETAILS
- EATMENT BUILDING ADDITION AND E PLAN IMPROVEMENTS
- EATMENT BUILDING ADDITION, PUMPS D PLUMBING DETAILS
- EATMENT BUILDING ADDITION AND ECTRICAL DETAILS
- ATER SYSTEM STANDARDS

EXHIBIT J1

RECEIVED
MAR 10 1998
PLANNING DIVISION

SET NO. 10

#45

ICT

CKY

'S

AINS)

IMPROVEMENTS ATION AND MAINS

ACT "A"

OWNERS

N, CHAIRMAN
SECRETARY
MEASURER

1998
(MAY 1998)

& ASSOCIATES, INC.

S & SURVEYORS

* PADUCAH KENTUCKY 42003
* FAX (502) 554-2738

INDEX	
SHEET	TITLE
1	COVER
2	OVERALL DISTRIBUTION
3	U.S. HWY 45 SUPPLY INDUSTRIAL PARK IM
4	ELEVATED TANK SITE MISCELLANEOUS DET.
5	TREATMENT BUILDING SITE PLAN IMPROVEM
6	TREATMENT BUILDING AND PLUMBING DETA
7	TREATMENT BUILDING ELECTRICAL DETAILS
8	WATER SYSTEM STAN

RECEIVED
MAR 10 1998
PLANNING
DIVISION

SE

WATER DISTRICT

COUNTY, KENTUCKY

TRIAL PARK

IMPROVEMENTS

DISTRIBUTION AND MAINS

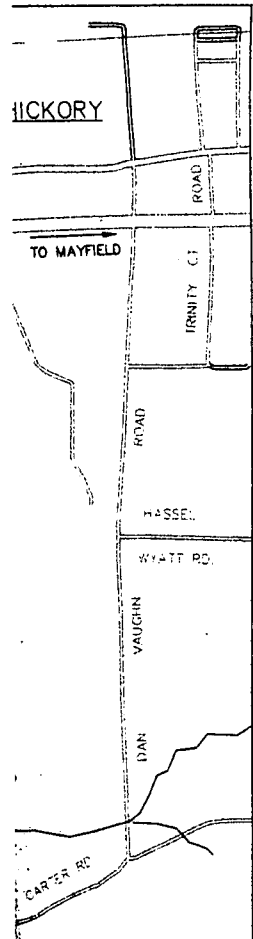
PROJECT "A"

OWNERS

MANAGER, CHAIRMAN
SECRETARY
TREASURER

INDEX	
SHEET	TITLE
1	COVER
2	OVERALL DISTRIBUTION
3	U.S. HWY 45 SUPPLY

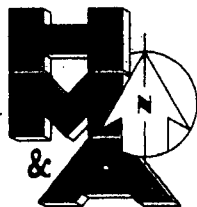
WATER SYSTEM IMPROVEMENT PUMP STATION CONTRACT



COMMISSIONERS

ROBERT H. SULLIVAN, CHAIRMAN
TOMMY C. GREEN, SECRETARY
SAM E. DAVIS, TREASURER

APRIL, 1998
(BID OCTOBER 1998)

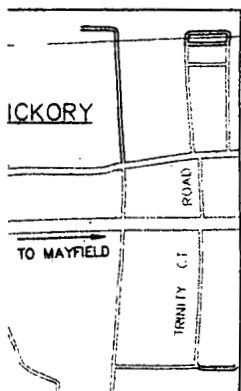


HUNTER MARTIN & ASSOC

ENGINEERS & SURVEYORS
3220 LONE OAK ROAD * PADUCAH KENTUCKY
(502) 554-2737 * FAX (502) 554-

WICKORY WATER WORKS, GRAVES COUN

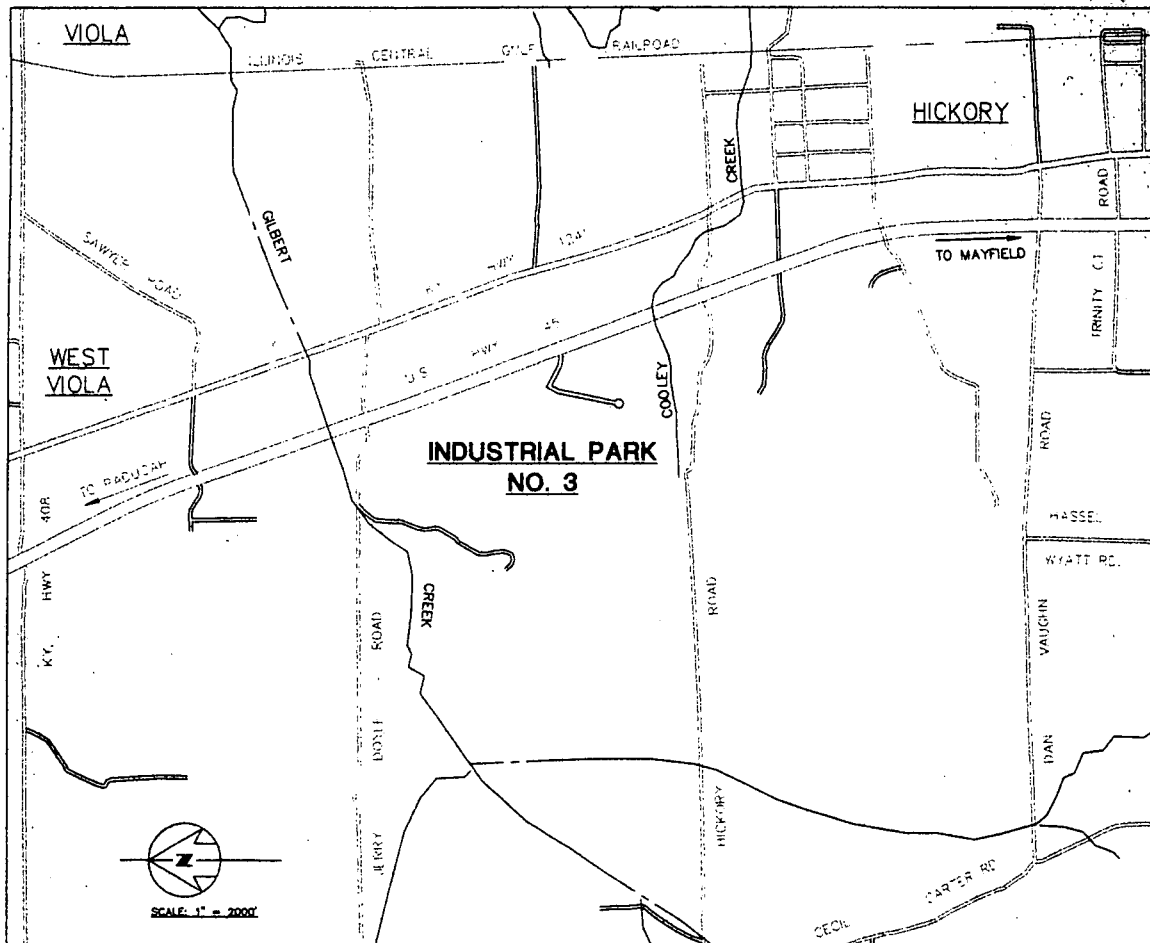
1998 INDUSTRIAL WATER SYSTEM IMP ROVED PUMP STATI CONTRACT



COMMISSIONERS

ROBERT H. SULLIVAN, CHAIRMAN
TOMMY C. GREEN, SECRETARY
SAM E. DAVIS, TREASURER

WATER (BOOSTER)



LOCATION MAP

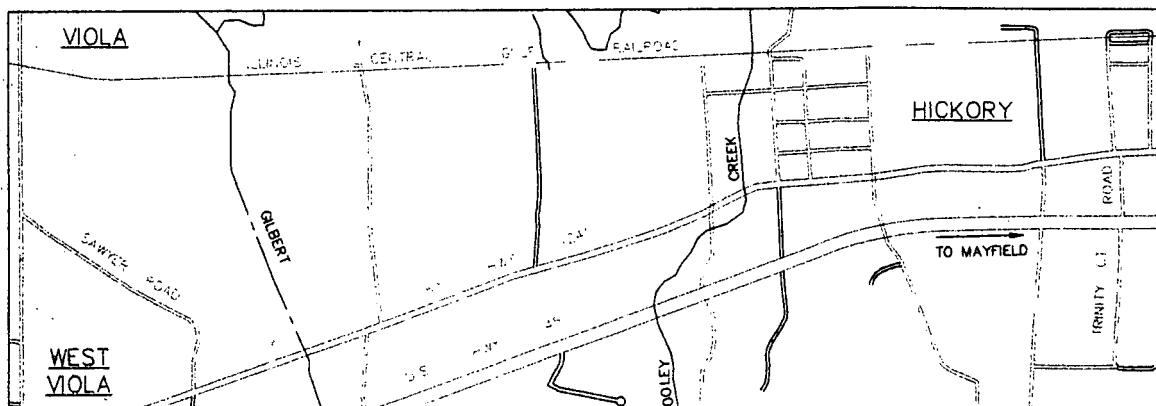
EDA Project No. AKY 0382

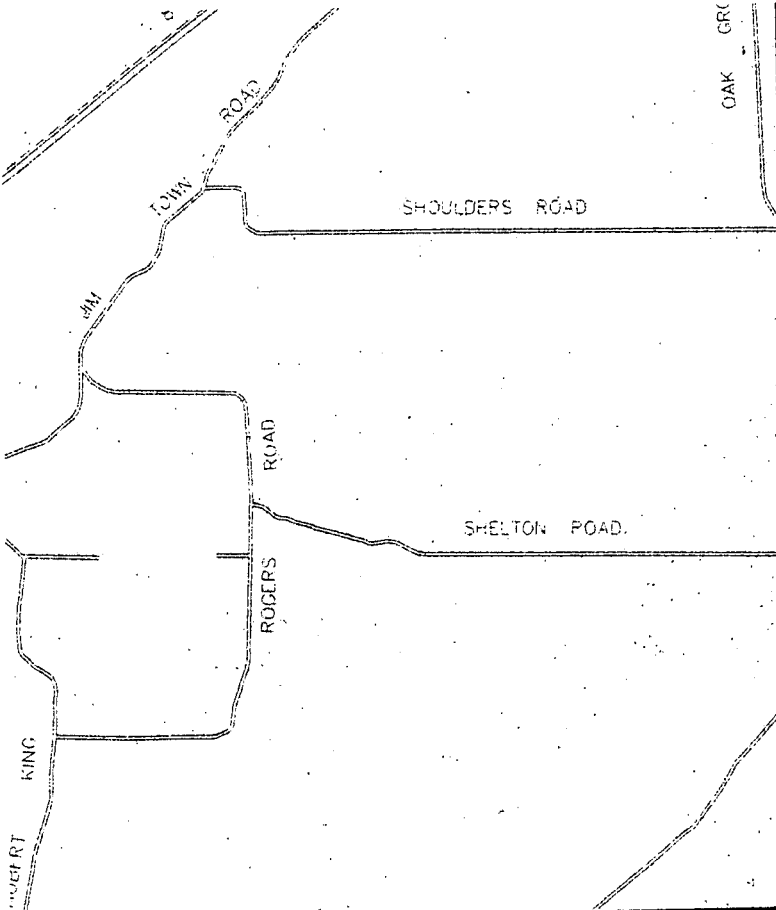


Rod H. Martin

HICK OF HICKORY,

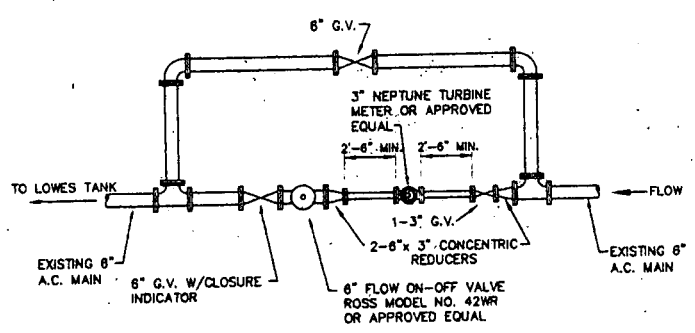
19
WATER
(BOOSTER)





Drawn by:
 SDC
 Checked by:
 JJ
 File:
 HSI97A08
 Date:
 1-12-98
 Revised:
 4-22-98

OVERALL DISTRIBUTION SYSTEM
 HICKORY WATER DISTRICT



- NOTES:**
1. ALL PIPE & FITTINGS SHALL BE FLANGED DUCTILE IRON AND SHALL BE PROPERLY BLOCKED.
 2. RADIO CONTROL UNIT AND PRESSURE TRANSMITTER TO BE LOCATED AT LOWES TANK.
 3. PANEL BOARD AT LOWES MASTER METER SHALL BE IDENTICAL TO THE DETAIL SHOWN ON SHEET 4.

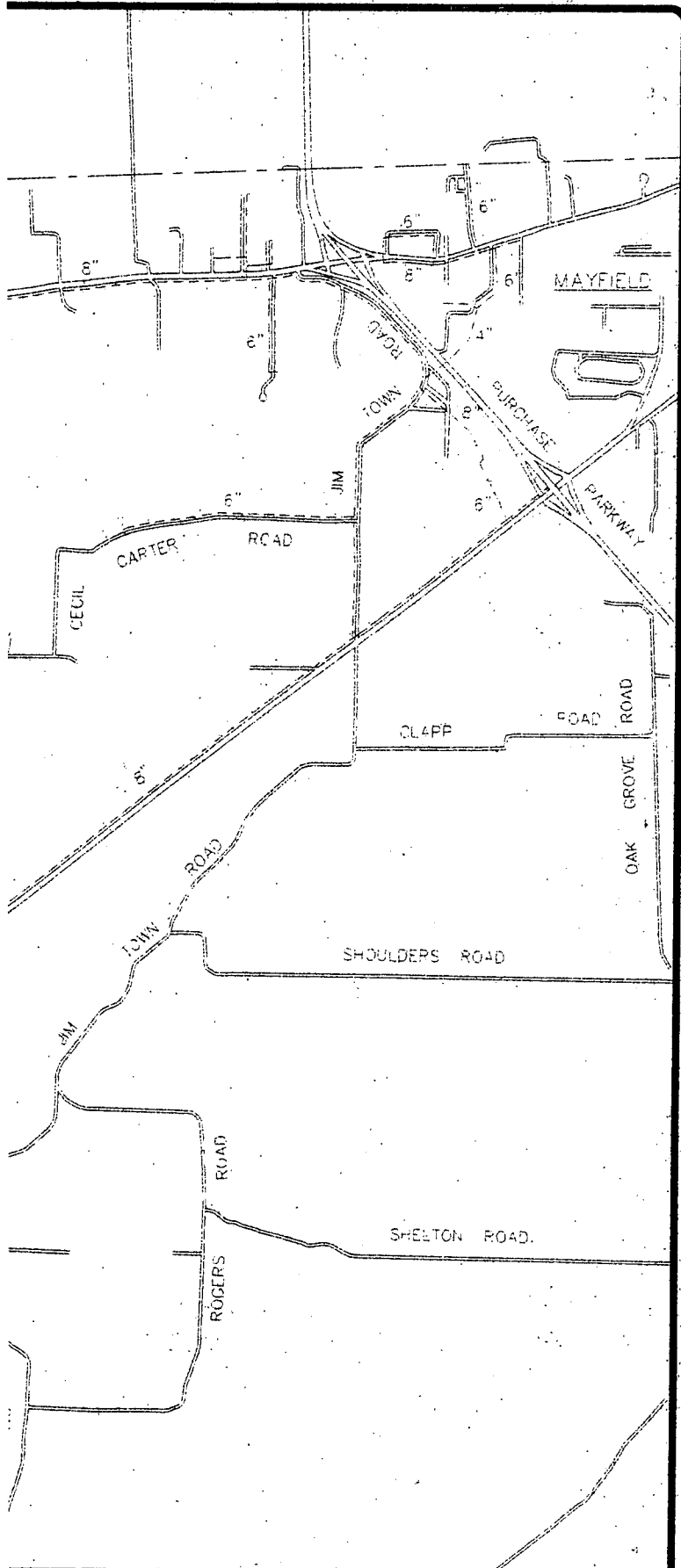
0" LG.
ET

LOWES MASTER METER
N.T.S.

Sheet

2

of 8 sheets

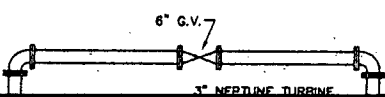


HUNTER MARTIN & ASSOCIATES, INC.

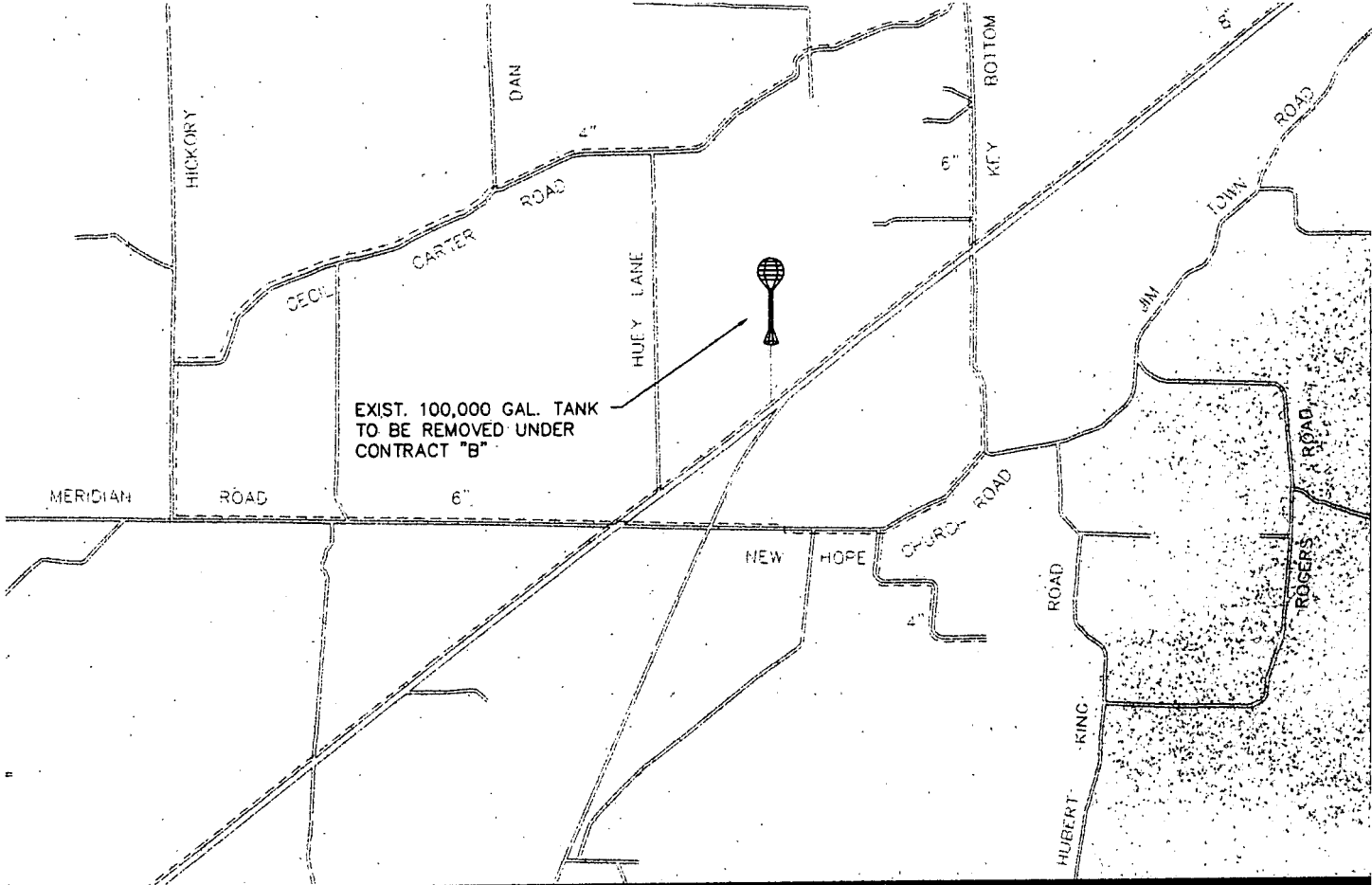
ENGINEERS & SURVEYORS
 3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
 (502) 554-2737 • FAX (502) 554-2738



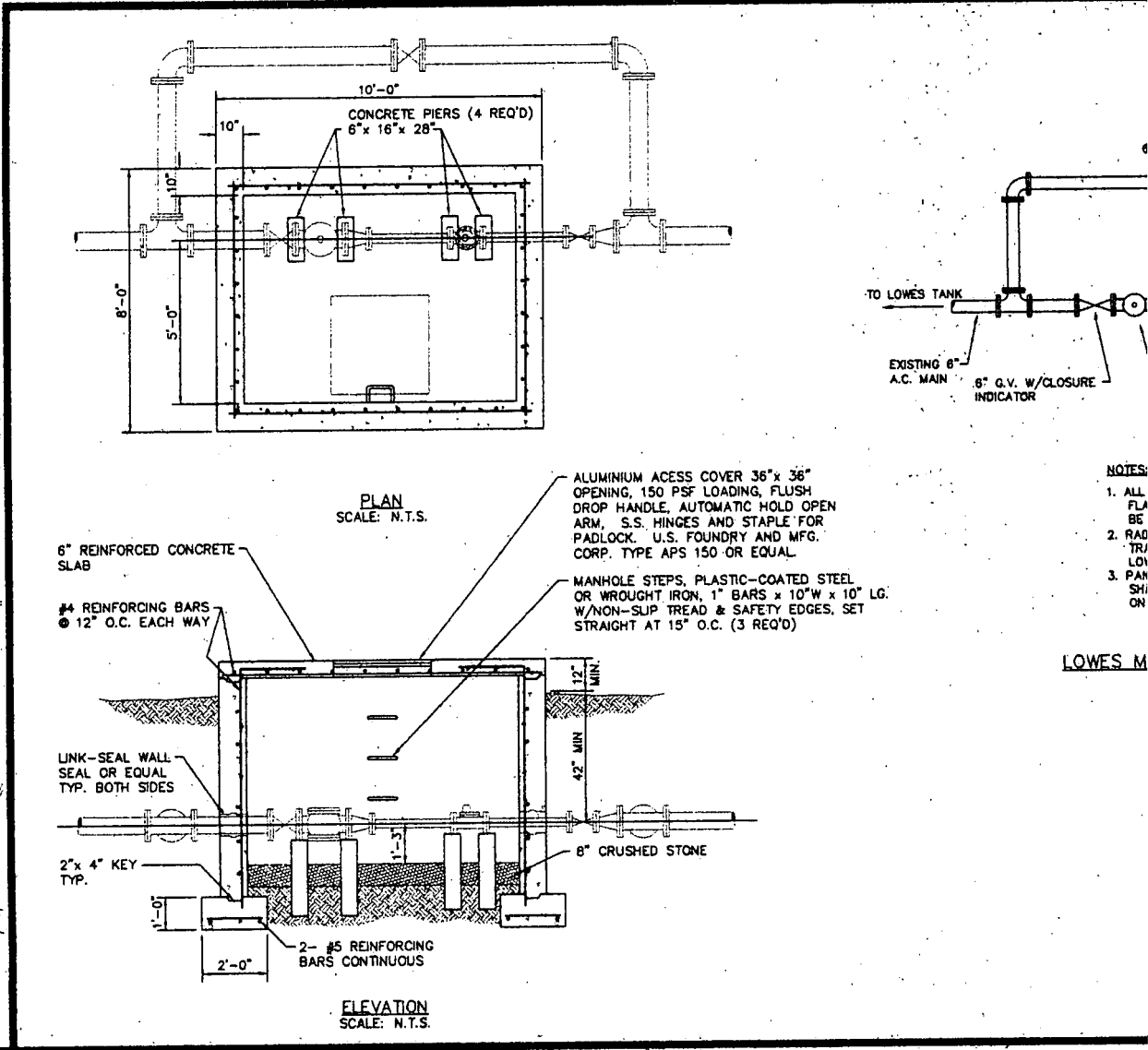
Drawn by:	SDC
Checked by:	JJ
File:	HS197A08
Date:	1-12-98
Revised:	4-22-98



RICT

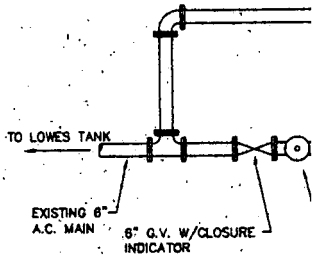


EXIST. 100,000 GAL. TANK
TO BE REMOVED UNDER
CONTRACT "B"



PLAN
SCALE: N.T.S.

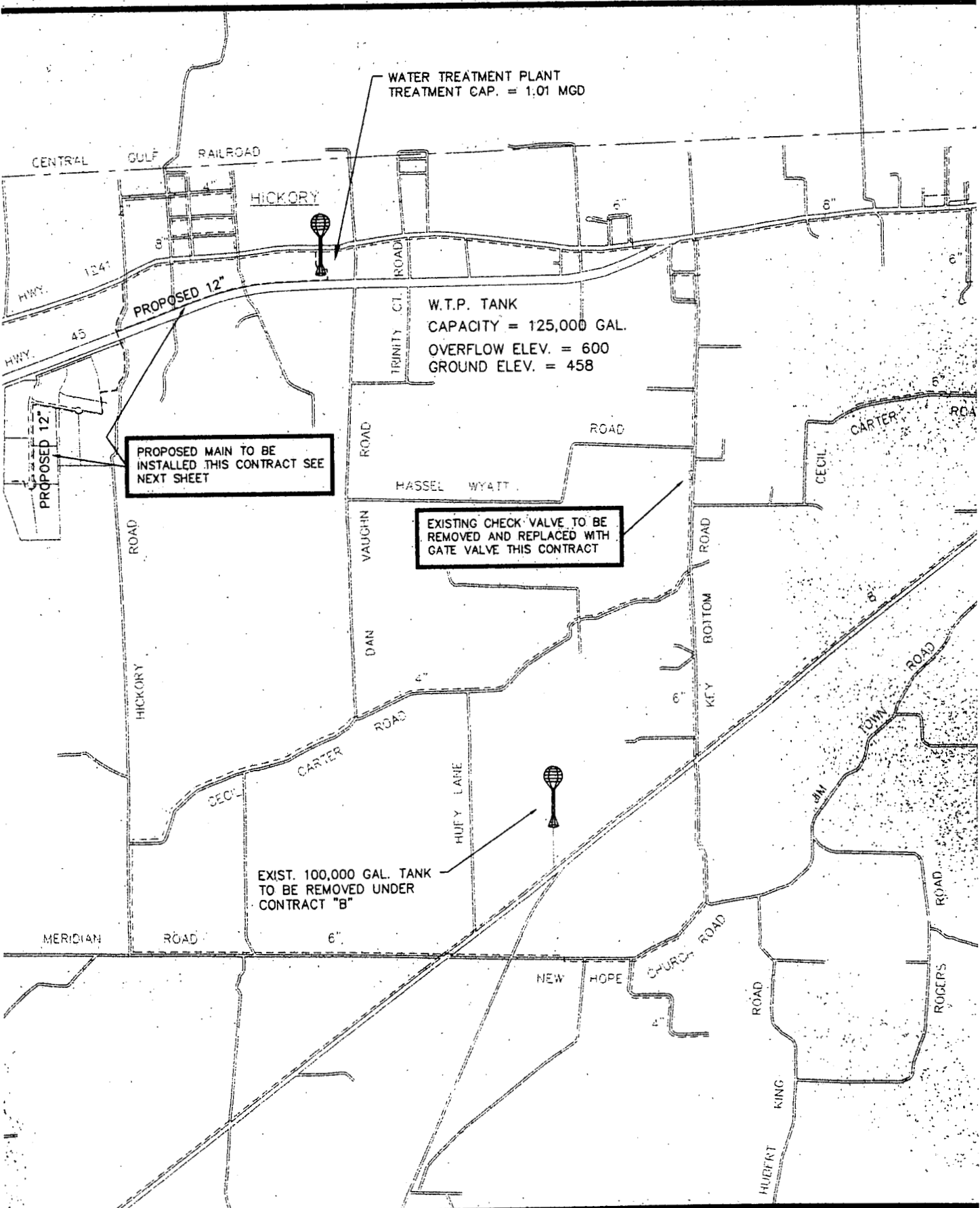
ELEVATION
SCALE: N.T.S.



NOTES:

1. ALL
FLA
BE
2. RAU
TRU
LOI
3. PAN
SHI
ON

LOWES M



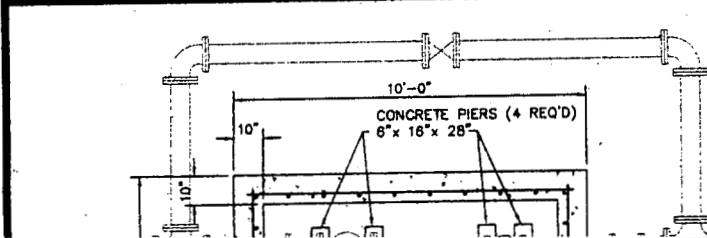
WATER TREATMENT PLANT
TREATMENT CAP. = 1.01 MGD

W.T.P. TANK
CAPACITY = 125,000 GAL.
OVERFLOW ELEV. = 600
GROUND ELEV. = 458

PROPOSED MAIN TO BE
INSTALLED THIS CONTRACT SEE
NEXT SHEET

EXISTING CHECK VALVE TO BE
REMOVED AND REPLACED WITH
GATE VALVE THIS CONTRACT

EXIST. 100,000 GAL. TANK
TO BE REMOVED UNDER
CONTRACT "B"



PROPOSED 500,000 GAL. TANK TO BE INSTALLED UNDER CONTRACT "B" OVERFLOW ELEV. = 655

LAMPKINS CLAYPT. ROAD

JERRY DOYLE ROAD

HICKORY

MERIDIAN ROAD

ROAD

TURNER

KY. HWY. 849

KY. HWY. 945

CLARENCE

JEWELL RANCE

POTTSVILLE

WELSON CREEK

HWY. 440

KY. HWY. 406

FLOW ON-OFF VALVE AND LOWES MASTER METER TO BE INSTALLED THIS CONTRACT (SEE DETAIL THIS SHEET)

LOWES TANK
CAPACITY = 75,000 GAL.
OVERFLOW ELEV. = 576
GROUND ELEV. = 484

RADIO CONTROLS TO BE INSTALLED AT LOWES TANK THIS CONTRACT AS SPECIFIED

KY. HWY. 339

ILLINOIS CENTRAL GULF

6" REI SLAB

#4 REI @ 12"

LINK-S SEAL O TYP. BI

2" x 4" TYP.

9AZ

VIOLA

ILLINOIS CENTRAL

GULF

JOHN WHITHMORE ROAD

SANMYER ROAD

U.S. HWY. 45

1241

PROPOSED

4" 12"

OGDEN ROAD

WEST VIOLA



PROPOSED 12"

PROPOSED 12" INSTALLED NEXT SHEET

PROPOSED 500,000 GAL. TANK TO BE INSTALLED UNDER CONTRACT "B" OVERFLOW ELEV. = 655

JERRY DOYLE ROAD

HICKORY ROAD

LAMPKINS CLAYBILT ROAD

MERIDIAN ROAD

ROAD

TURNER

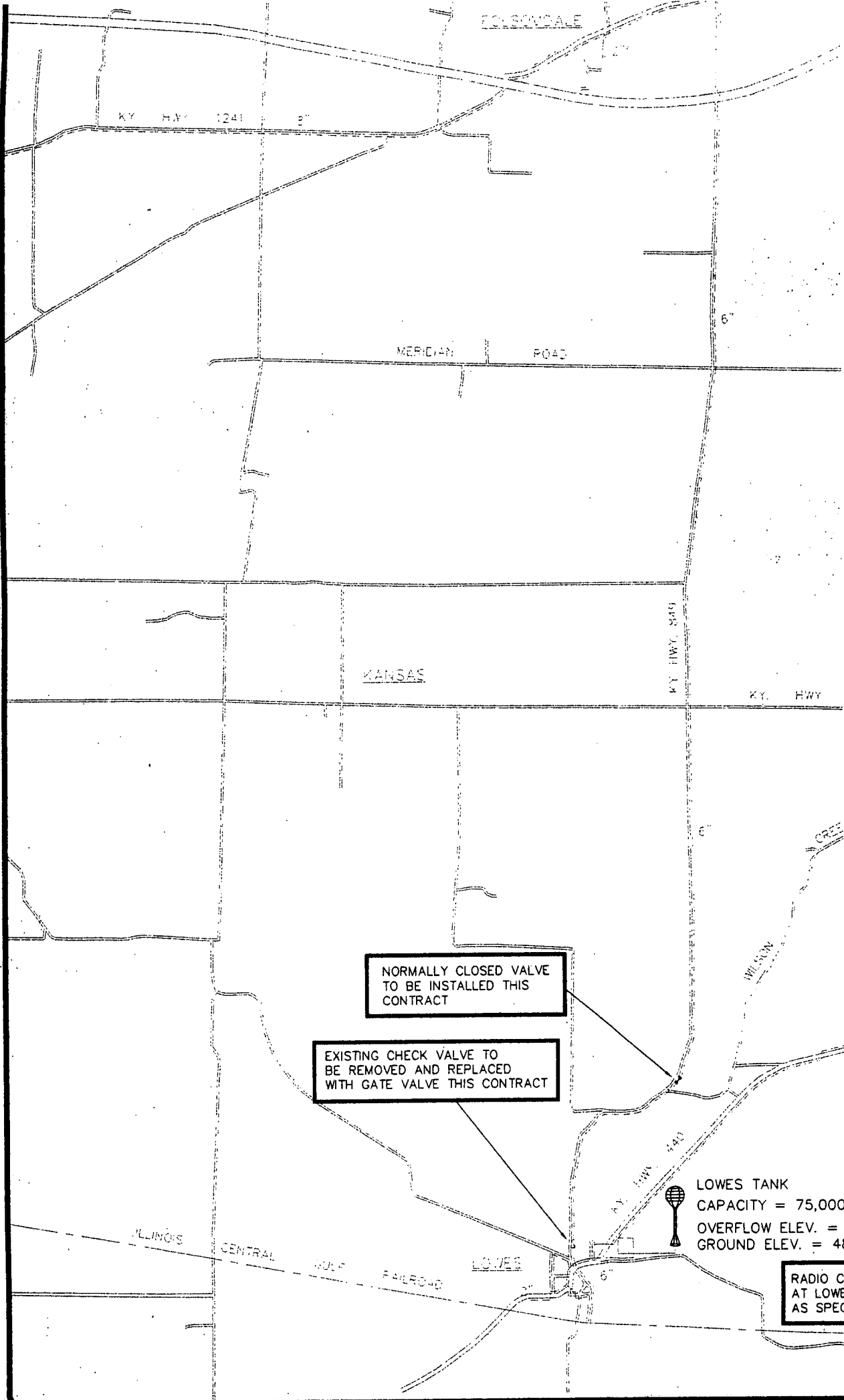
KY. HWY. 845

KY. HWY. 845

POTTSDALE

CLARENCE

JEWELL NANCE



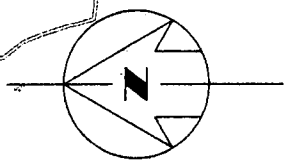
NORMALLY CLOSED VALVE
TO BE INSTALLED THIS
CONTRACT

EXISTING CHECK VALVE TO
BE REMOVED AND REPLACED
WITH GATE VALVE THIS CONTRACT

LOWES TANK
CAPACITY = 75,000
OVERFLOW ELEV. =
GROUND ELEV. = 48

RADIO C
AT LOWE
AS SPEC

BOAZ



SCALE: 1" = 2,000'

KY. HWY. 849

JOHN

WHD

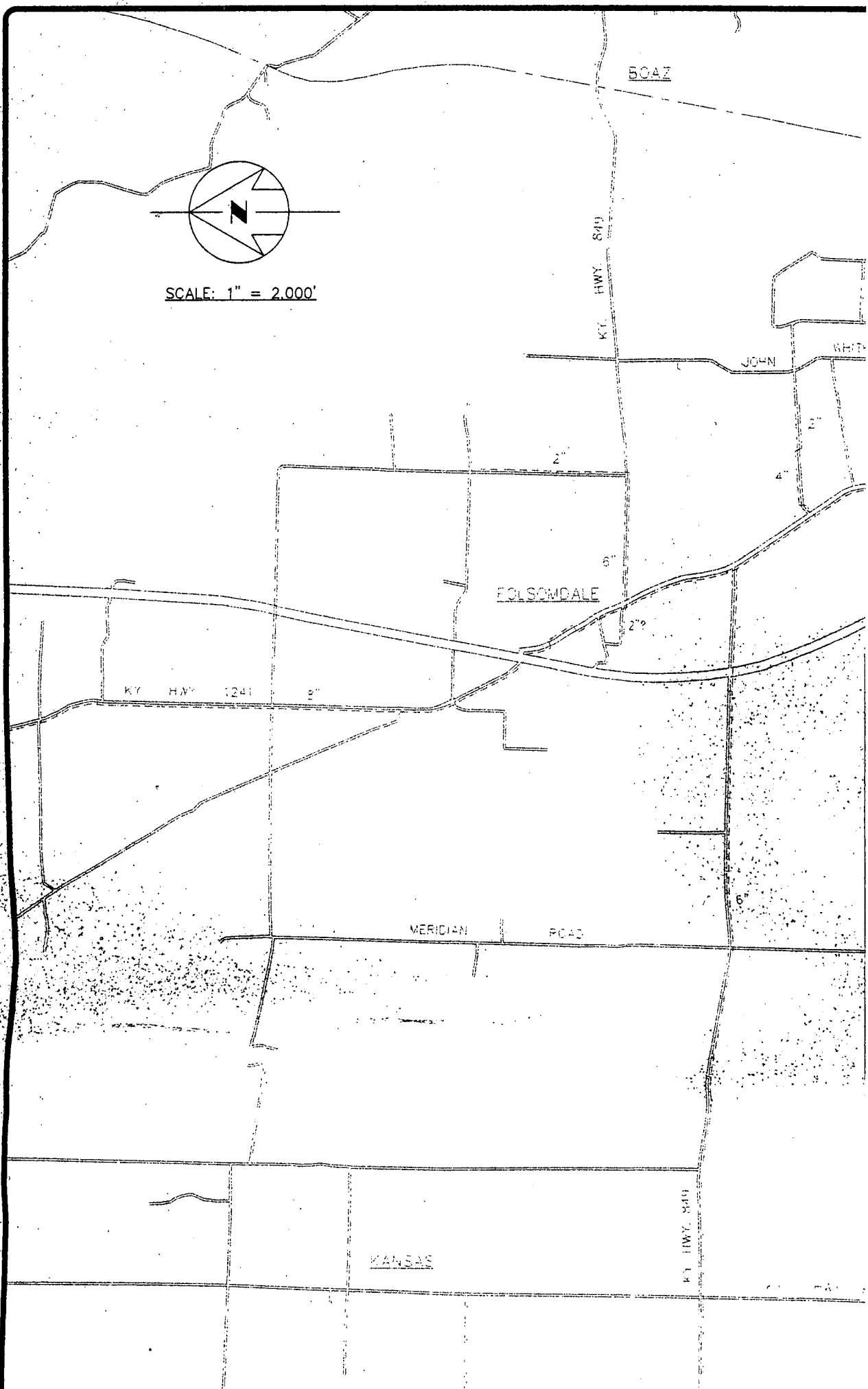
FOLSOMDALE

KY HWY 1241

MERIDIAN ROAD

KANSAS

KY HWY. 849



ROAD

TRINITY COURT

PROPOSED IMPROVEMENTS AT WTP INCLUDING BUILDING ADDITION, PUMPS AND RADIO TELEMETRY. (SEE SHEETS 5, 6 AND 7)

TO MAYFIELD

HUN:



XIM/W/ O.W

Drawn by: SDC

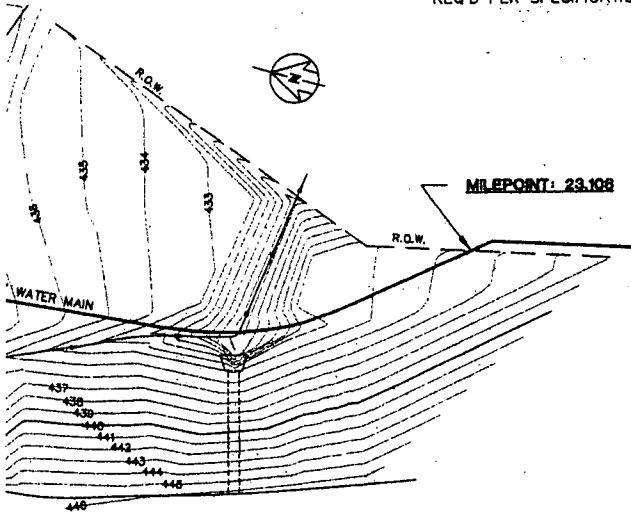
Checked by: JRJ

File: HSI97A02

Date: 1/12/98

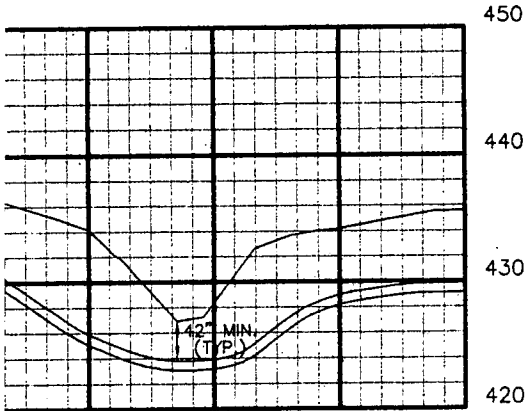
Revised: 4/22/98

NOTE: CASING END SEALS AND CARRIER PIPE SKIDS REQ'D PER SPECIFICATIONS



U.S. HWY 45

PLAN SCALE: 1"=60'



1+80 2+40 3+00 3+60

PROFILE

VERTICAL SCALE: 1"=10'
HORIZONTAL SCALE: 1"=60'

U.S. HWY. 45 SUPPLY MAIN AND INDUSTRIAL PARK IMPROVEMENTS HICKORY WATER DISTRICT

Sheet

3

of 8 sheets

CSL V. 10

HICKORY WATER DISTRICT EXISTING
TREATMENT PLANT INCLUDING:
OFFICE BUILDING
TREATMENT PLANT BUILDING
3 - WELLS
125,000 GAL. PEDISPHERE

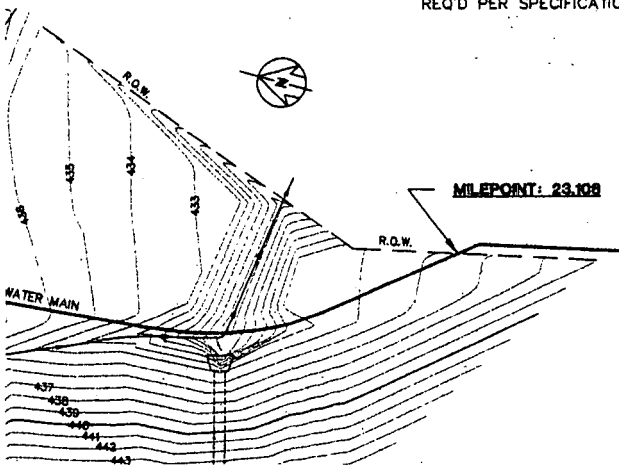
ROAD

PROPOSED IMPROVEMENTS AT
WTP INCLUDING BUILDING
ADDITION, PUMPS AND RADIO
TELEMETRY, (SEE SHEETS 5, 6
AND 7)

TRINITY COURT

TO MAYFIELD

NOTE:
CASING END SEALS AND
CARRIER PIPE SKIDS
REQ'D PER SPECIFICATIONS



HUNTER MARTIN & ASSOCIATES, INC.



ENGINEERS & SURVEYORS
3220 LONG OAK ROAD • SUITE 101 • KENTUCKY 42003
(502) 384-2737 • FAX (502) 384-2738

Drawn by:
SDC
Checked by:
JRJ
File:
HSI97A02
Date:
1/12/98
Revised:
4/22/98

MAIN
VEMENTS
RICT

W/

O.W

W/

LY 40 L.F. CASING

SEE SHEET 5 FOR SITE PLAN IMPROVEMENTS

APPROXIMATELY 5,100 L.F. OF 12" SDR 21 PVC WATER MAIN INSTALLED IN EASEMENT

PROPOSED IMPROVEMENT: WTP INCLUDING BUILDING, ADDITION, PUMPS AND RA TELEMETRY, (SEE SHEETS AND 7)

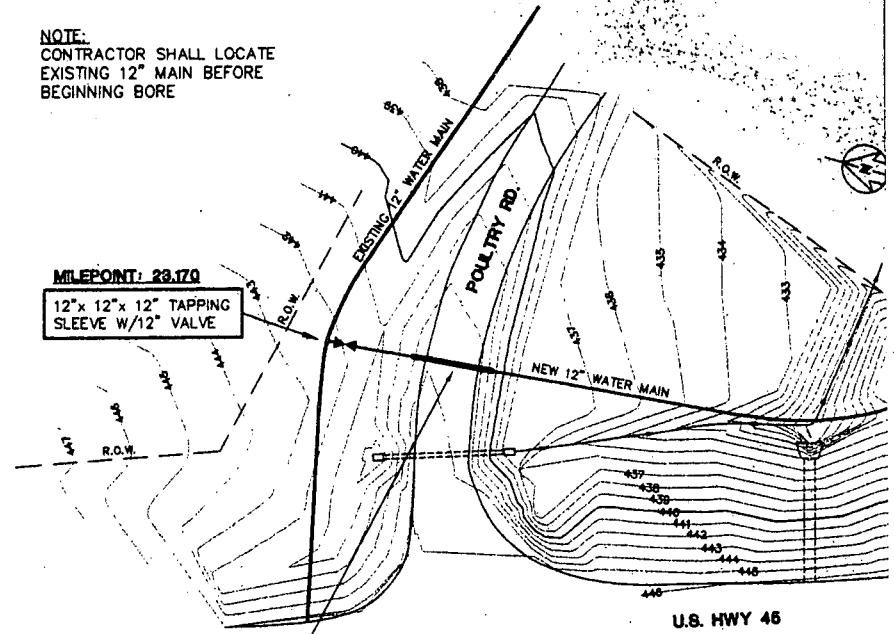
R.O.W.

NOTE: CONTRACTOR SHALL LOCATE EXISTING 12" MAIN BEFORE BEGINNING BORE

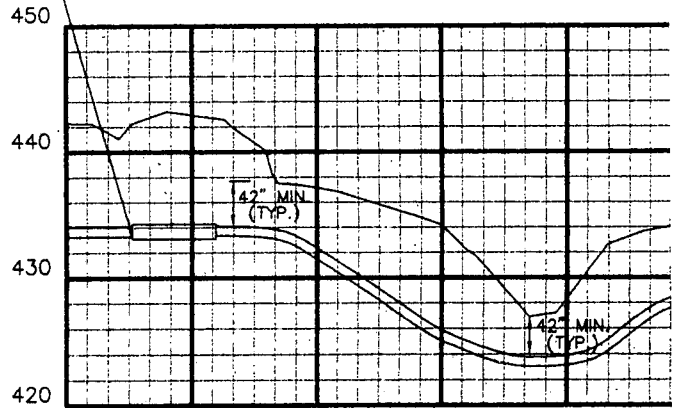
MILEPOINT: 23.170
12"x 12"x 12" TAPPING SLEEVE W/12" VALVE

EXISTING 12" Y ROAD (ING) BY (ARD AND PMENT

APPROXIMATELY 40 L.F. BORE W/18" CASING



PLAN SCALE: 1"=60'



PROFILE VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=60'

HICKORY

HICKORY WATER DISTRICT
TREATMENT PLANT INCLUDE
OFFICE BUILDING
TREATMENT PLANT BUIL
3 - WELLS
125,000 GAL. PEDISPHE

EXISTING 4"

EXISTING 4"

EXISTING 6"

ELY 40 L.F.
" CASING

SEE SHEET 5 FOR SITE PLAN IMPROVEMENTS

APPROXIMATELY 5,100 L.F.
OF 12" SDR 21 PVC WATER
MAIN INSTALLED IN EASEMENT

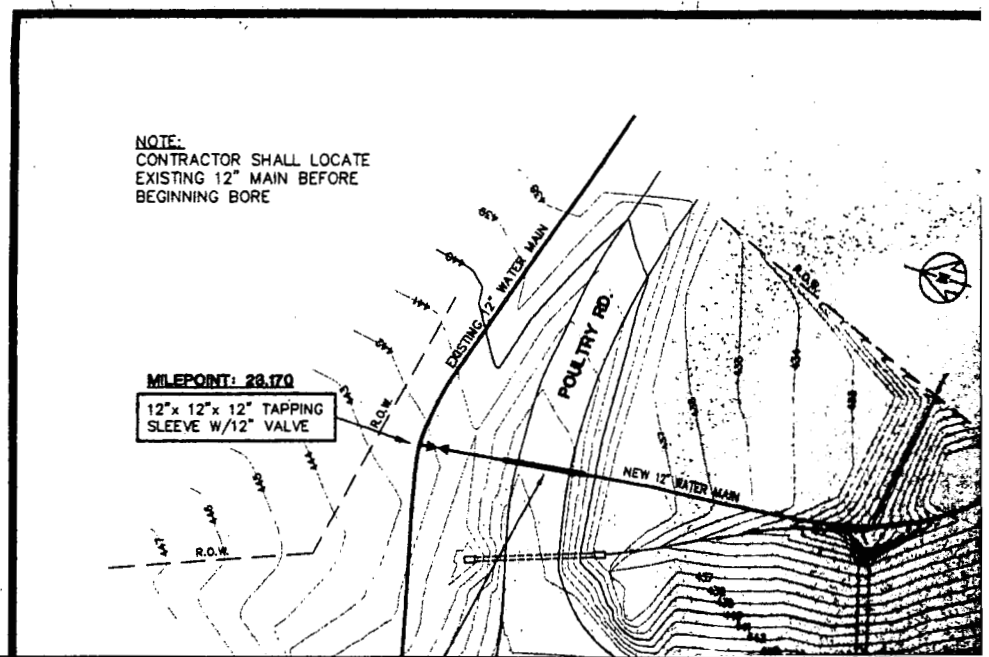
PROPOSED IMPROVEMENTS
WTP. INCLUDING BUILDING
ADDITION, PUMPS, AND RA
TELEMETRY. (SEE SHEETS
AND 7)

R.O.W.

NOTE:
CONTRACTOR SHALL LOCATE
EXISTING 12" MAIN BEFORE
BEGINNING BORE

MILEPOINT: 26.170
12" x 12" x 12" TAPPING
SLEEVE W/12" VALVE

EXISTING 12"
RY ROAD
ING) BY
DARD AND
PMENT

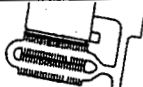


126 L.F. OF EXISTING 12" SDR 21 PVC WATER MAIN ALONG POULTRY ROAD BY INDUSTRIAL BOARD AND LOCAL DEVELOPMENT CORPORATION

APPROXIMATELY 40 L.F. BORE W/ 18" CASING

SEE DETAIL THIS SHEET FOR TIE-IN AND CREEK CROSSING

REMINGTON ARMS CO., INC.



RIFLE WAY

EXIST. VA.

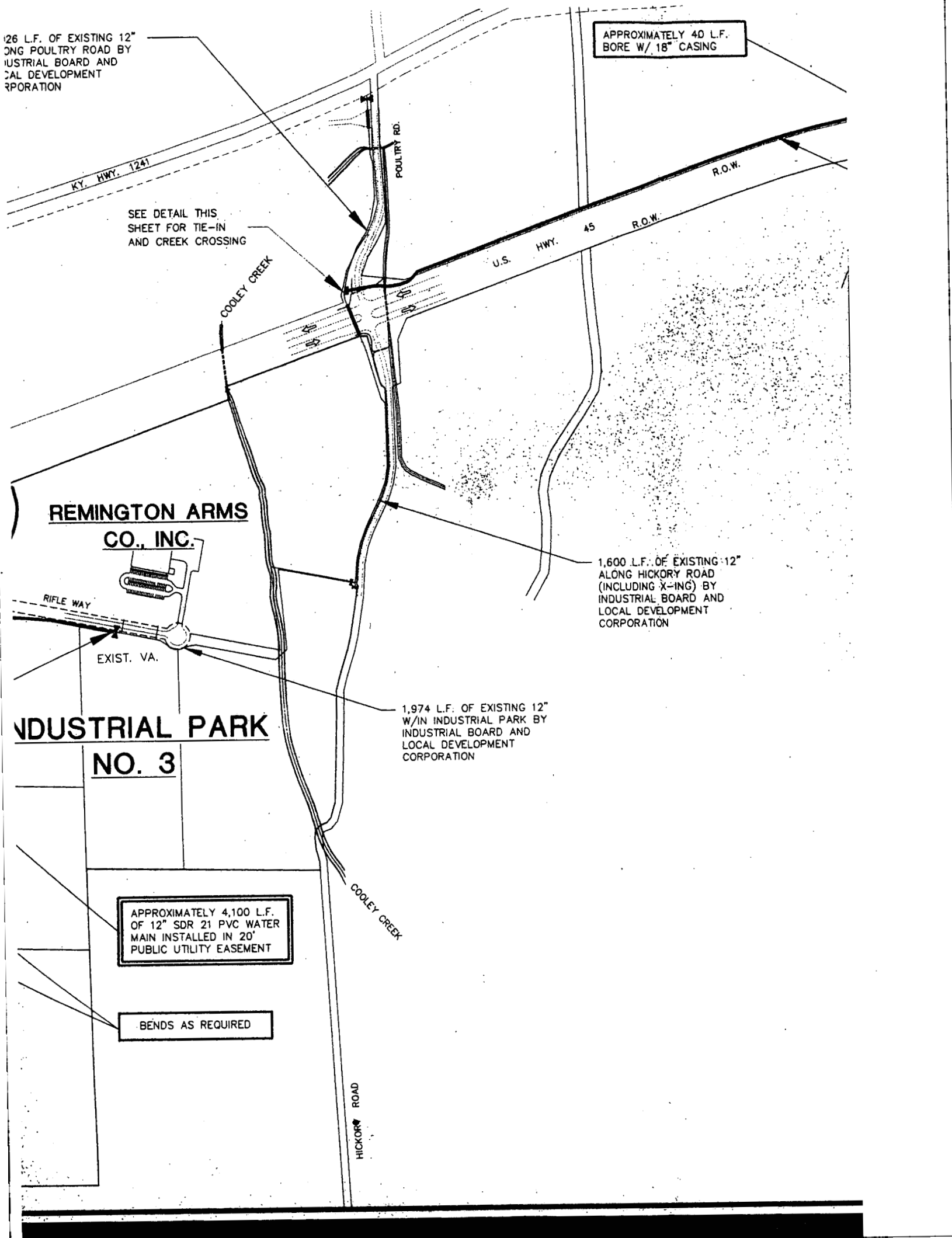
INDUSTRIAL PARK NO. 3

1,974 L.F. OF EXISTING 12" W/IN INDUSTRIAL PARK BY INDUSTRIAL BOARD AND LOCAL DEVELOPMENT CORPORATION

1,600 L.F. OF EXISTING 12" ALONG HICKORY ROAD (INCLUDING X-ING) BY INDUSTRIAL BOARD AND LOCAL DEVELOPMENT CORPORATION

APPROXIMATELY 4,100 L.F. OF 12" SDR 21 PVC WATER MAIN INSTALLED IN 20' PUBLIC UTILITY EASEMENT

BENDS AS REQUIRED



HICKORY ROAD

COOLEY CREEK

POULTRY RD.

COOLEY CREEK

KY. HWY. 1241

U.S. HWY. 45

R.O.W.

R.O.W.

EXISTING 6"

EXISTING 4"

EXISTING 4"

APPROXIMATELY 40 L.F.
BORE W/ 18" CASING

26 L.F. OF EXISTING 12"
ALONG POULTRY ROAD BY
INDUSTRIAL BOARD AND
LOCAL DEVELOPMENT
CORPORATION

SEE DETAIL THIS
SHEET FOR TIE-IN
AND CREEK CROSSING

**REMINGTON ARMS
CO., INC.**



RIFLE WAY

EXIST. VA.

1,600 L.F. OF EXISTING 12"
ALONG HICKORY ROAD
(INCLUDING X-ING) BY
INDUSTRIAL BOARD AND
LOCAL DEVELOPMENT
CORPORATION

KY. HWY. 1241

POULTRY RD.

COOLEY CREEK

U.S. HWY. 45

R.O.W.

R.O.W.

1,026 L.F. OF EXISTING 12"
ALONG POULTRY ROAD BY
INDUSTRIAL BOARD AND
LOCAL DEVELOPMENT
CORPORATION

KY. HWY. 1241

SEE DETAIL T
SHEET FOR T
AND CREEK C

EXISTING 8"

- 1 - STANDARD HYDRANT
W/AUX. VALVE
- 1 - ANCHORING TEE
W/PLUG

APPROXIMATELY 40 L.F.
BORE W/ 18" CASING

TO PADUCAH

REMINGTON A
CO., INC.

- 1 - STANDARD HYDRANT
W/AUX. VALVE
- 1 - ANCHORING TEE

RIFLE WAY

EXIST. VA.

- 2 - 12" GATE VALVES
W/BOXES
- 1 - 12"x 12" TEE

1 - TIE-IN

INDUSTRIAL P
NO. 3

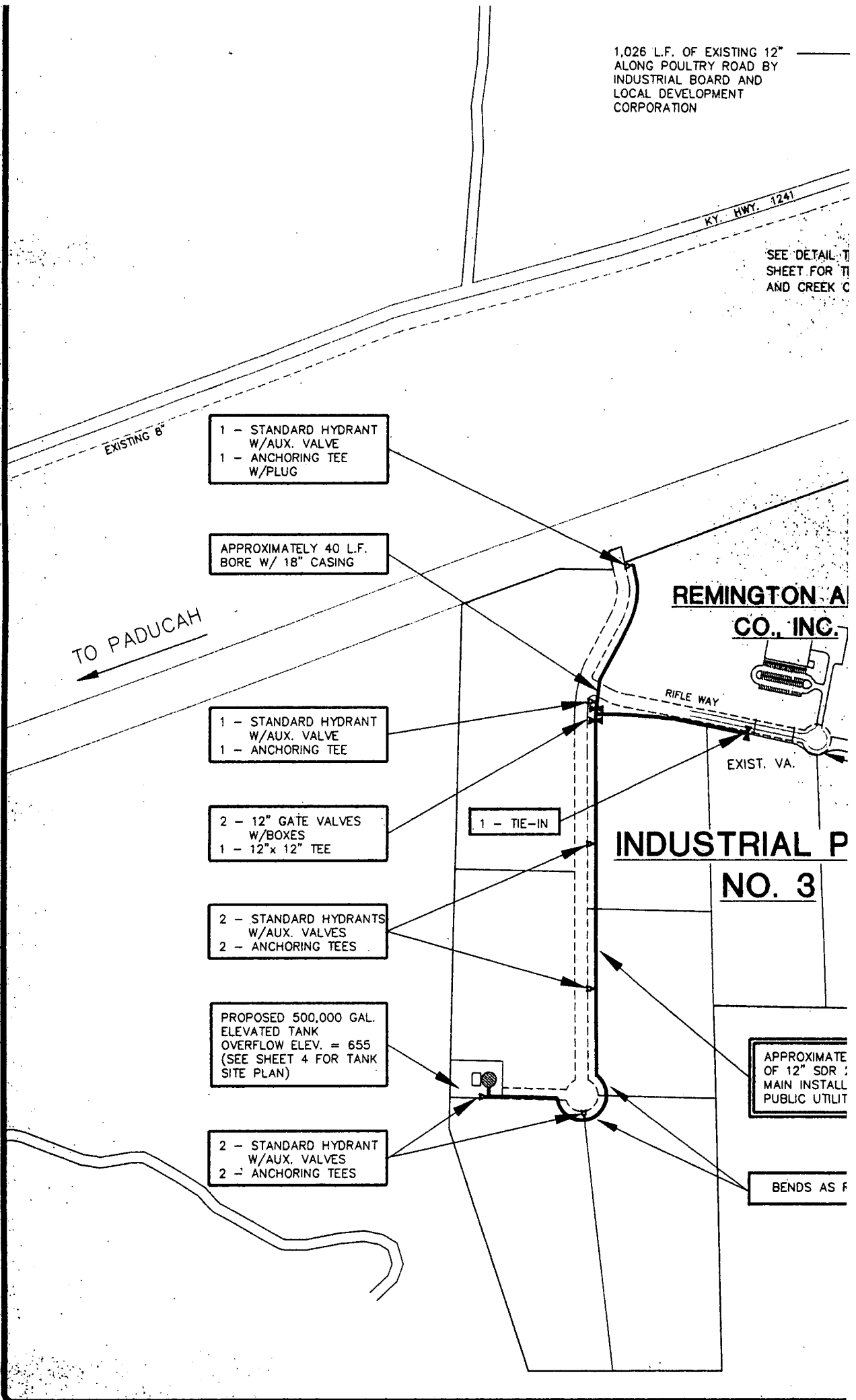
- 2 - STANDARD HYDRANTS
W/AUX. VALVES
- 2 - ANCHORING TEES

PROPOSED 500,000 GAL.
ELEVATED TANK
OVERFLOW ELEV. = 655
(SEE SHEET 4 FOR TANK
SITE PLAN)

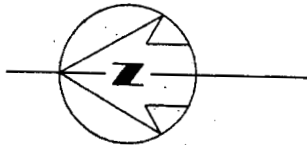
APPROXIMATE
OF 12" SDR ;
MAIN INSTALL
PUBLIC UTILIT

- 2 - STANDARD HYDRANT
W/AUX. VALVES
- 2 - ANCHORING TEES

BENDS AS F



ILLINOIS CENTRAL GULF RAILROAD



SCALE: 1" = 400'

1,026 L.F. OF EXISTING 12"
ALONG POULTRY ROAD BY
INDUSTRIAL BOARD AND
LOCAL DEVELOPMENT
CORPORATION

KY. HWY. 1241

SEE DETAIL T
SHEET FOR T
AND CREEK C

EXISTING 8"

- 1 - STANDARD HYDRANT
W/AUX. VALVE
- 1 - ANCHORING TEE
W/PLUG

APPROXIMATELY 40 L.F.
BORE W/ 18" CASING

TO PADUCAH

- 1 - STANDARD HYDRANT
W/AUX. VALVE
- 1 - ANCHORING TEE

**REMINGTON A
CO., INC.**

RIFLE WAY

EXIST. VA.



CTION

WIRE, 120V
R COMPANY

HEIGHT
D IN FIELD

RIGID GALV.

METER PER
IREMENTS

PHASE, 3 WIRE
AKER IN A
URE.

CIRCUIT BREAKERS
I CONDUITS TO:
TRANSMITTER
ION LIGHTS
PROTECTION
ROOF DUPLEX
TH GFI PROTECTION
NSMITTER

RIGID GALV. STEEL CONDUIT
GROUND ROD PER ARTICLE

- NOTES:**
1. CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND WORK AS SPECIFIED.
 2. SERVICE ENTRANCE POLE SHALL BE IN ACCORDANCE WITH THE POWER COMPANIES' REQUIREMENTS.
 3. ALL CONDUIT SHALL BE GALVANIZED STEEL, OVERSIZED FOR EASY REMOVAL AND INSTALLATION OF CONDUCTORS, AND PROPERLY SEALED TO ELIMINATE MOISTURE.
 4. CONTRACTOR SHALL INSTALL OIL POT ASSEMBLY IN A STD. METER BOX. SET NEAR SERVICE ENTRANCE POLE. VALVES SHALL BE PROVIDED IN THE METER BOX FOR EASY REMOVAL.
 5. PRESSURE TRANSMITTER, RTU, HEATERS ECT... ARE TO BE HOUSED IN ONE ENCLOSURE.

ICE ENTRANCE POLE

N.T.S.



Drawn by:
JRJ

Checked by:
RHM

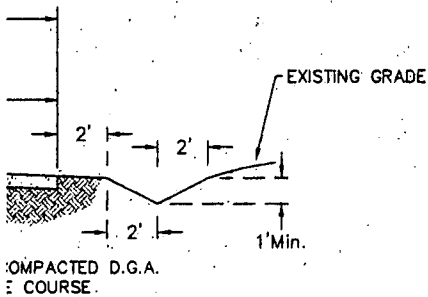
File:
HSI97A03

Date:
1/12/98

Revised:
4/22/98

**ELEVATED TANK SITE PLAN
AND
MISCELLANEOUS DETAILS
HICKORY WATER DISTRICT**

Sheet
4
of 8 sheets



DRIVE
 FROM ROADWAY AREA.
 SECTION GRADE
 AND CONSTRUCT TO INSURE

OF COMPACTED D.G.A.
 14

SECTION

WIRE, 120V
 PER COMPANY

HEIGHT
 IN FIELD

RIGID GALV.

METER PER
 REQUIREMENTS

- NOTES:**
1. CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND WORK AS SPECIFIED.
 2. SERVICE ENTRANCE POLE SHALL BE IN ACCORDANCE WITH THE POWER COMPANIES' REQUIREMENTS.
 3. ALL CONDUIT SHALL BE GALVANIZED STEEL, OVERSIZED FOR EASY REMOVAL AND INSTALLATION OF CONDUCTORS, AND PROPERLY SEALED TO ELIMINATE

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
 8220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
 (502) 554-2737 • FAX (502) 554-2738



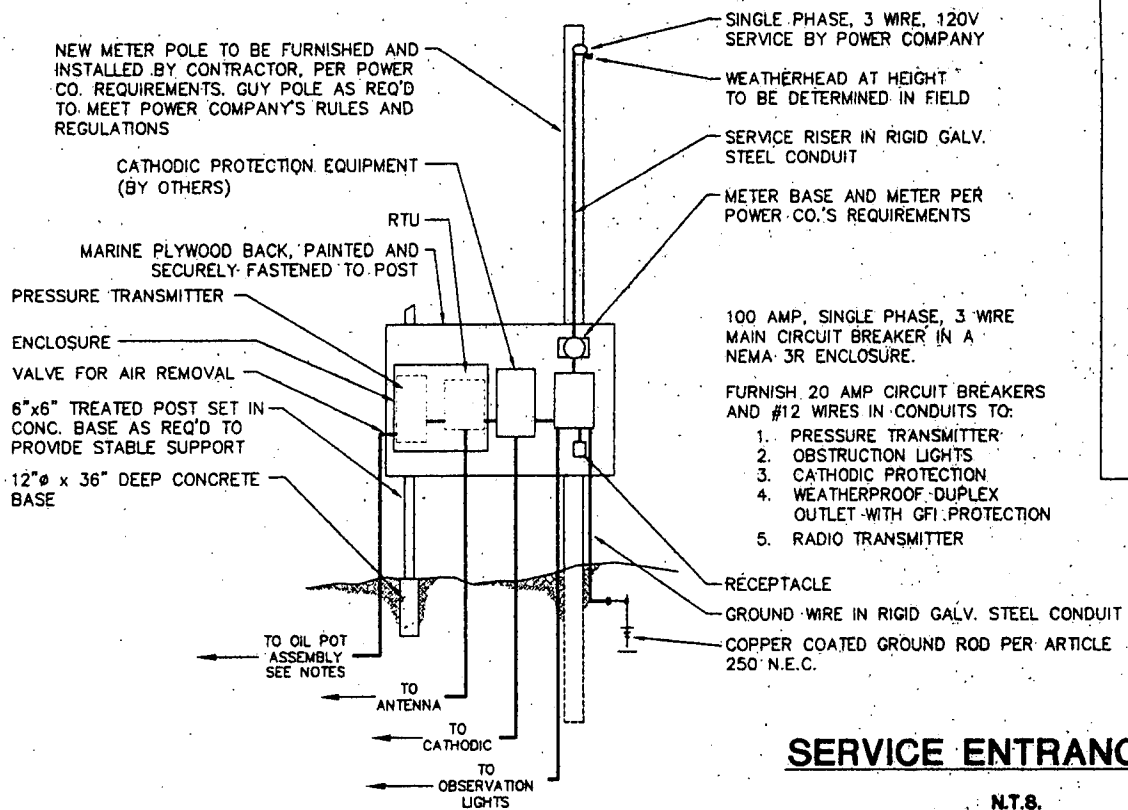
Drawn by: JRJ
Checked by: RHM
File: HSI97A03
Date: 1/12/98
Revised: 4/22/98

PLAN
 AILLS
 RICT

3. COMPACT ALL FILL MATERIAL AND CONSTRUCT TO INSURE DRAINAGE AWAY FROM DRIVE
4. SURFACE COURSE SHALL BE 6" OF COMPACTED D.G.A.
5. LANDSCAPE PER SPECIFICATION 14

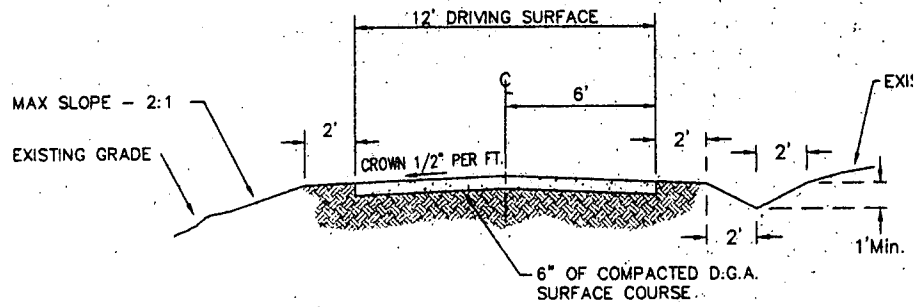
TYPICAL ROAD SECTION

N.T.S.



NOTES

1. CO
- AL
- AS
2. SE
- BE
- PO
3. AL
- ST
- AN
- AM
- MO
4. CC
- AS
- NE
- VA
- ME
5. PR
- EC
- EN



SPECIFICATIONS FOR DRIVE

1. CLEAR AND REMOVE TOP SOIL FROM ROADWAY AREA.
2. CONSTRUCT ROAD TO TYPICAL SECTION GRADE
3. COMPACT ALL FILL MATERIAL AND CONSTRUCT TO INSURE DRAINAGE AWAY FROM DRIVE
4. SURFACE COURSE SHALL BE 6" OF COMPACTED D.G.A.
5. LANDSCAPE PER SPECIFICATION 14

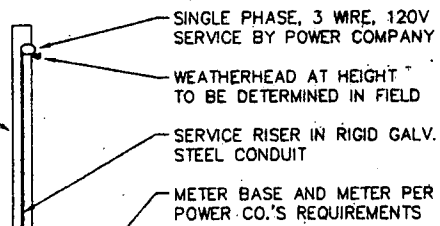
TYPICAL ROAD SECTION

N.T.S.

NEW METER POLE TO BE FURNISHED AND INSTALLED BY CONTRACTOR, PER POWER CO. REQUIREMENTS. GUY POLE AS REQ'D TO MEET POWER COMPANY'S RULES AND REGULATIONS

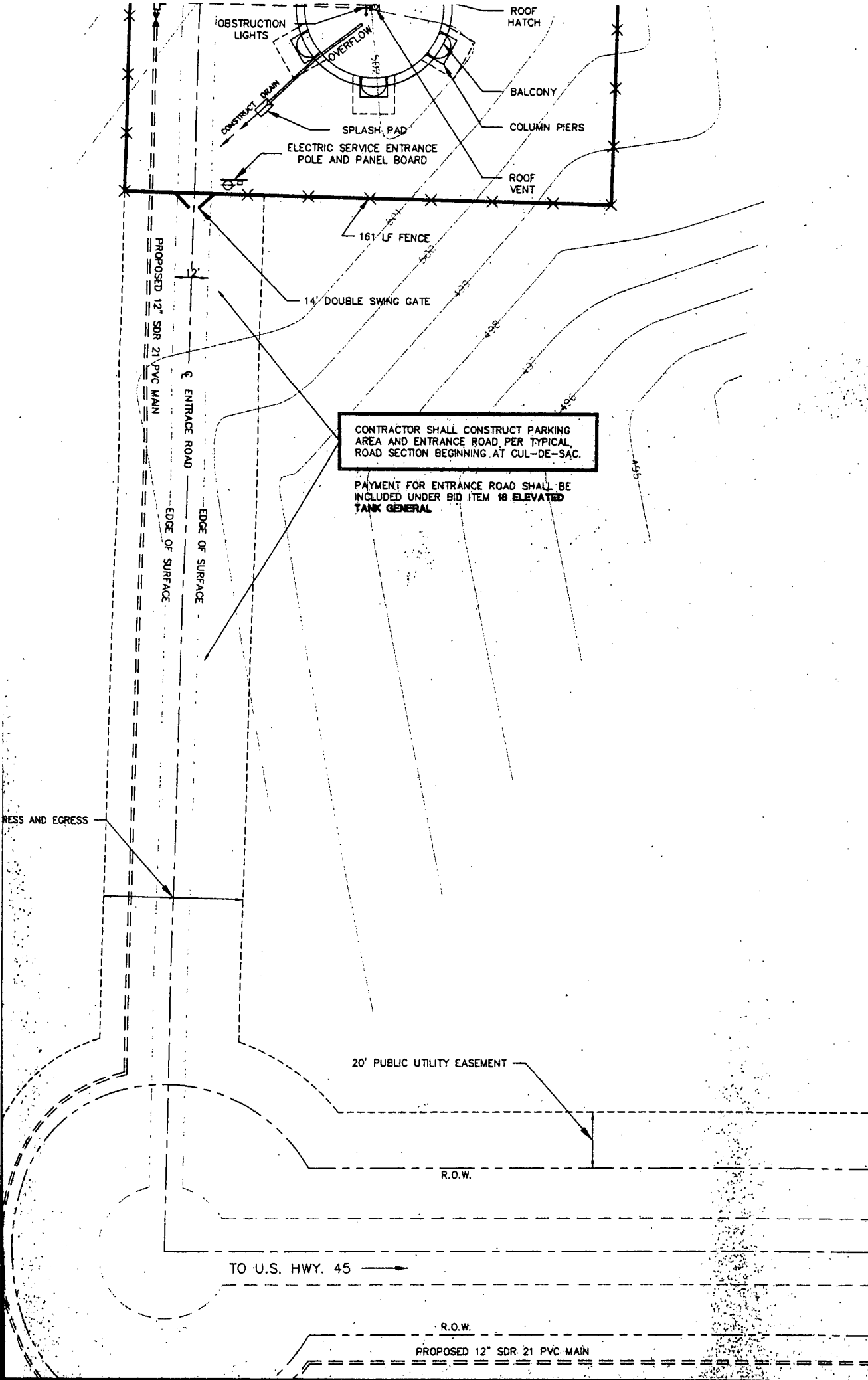
CATHODIC PROTECTION EQUIPMENT (BY OTHERS)

RTU



NOTES

1. C
.AL
A'
2. SI
BI
PI
3. .AL
SI
AI
AF



CONTRACTOR SHALL CONSTRUCT PARKING AREA AND ENTRANCE ROAD PER TYPICAL ROAD SECTION BEGINNING AT CUL-DE-SAC.

PAYMENT FOR ENTRANCE ROAD SHALL BE INCLUDED UNDER BID ITEM 18 ELEVATED TANK GENERAL

PRE
ENC
VAL
6" x
CON
PRC
12"
BAS

RESS AND EGRESS

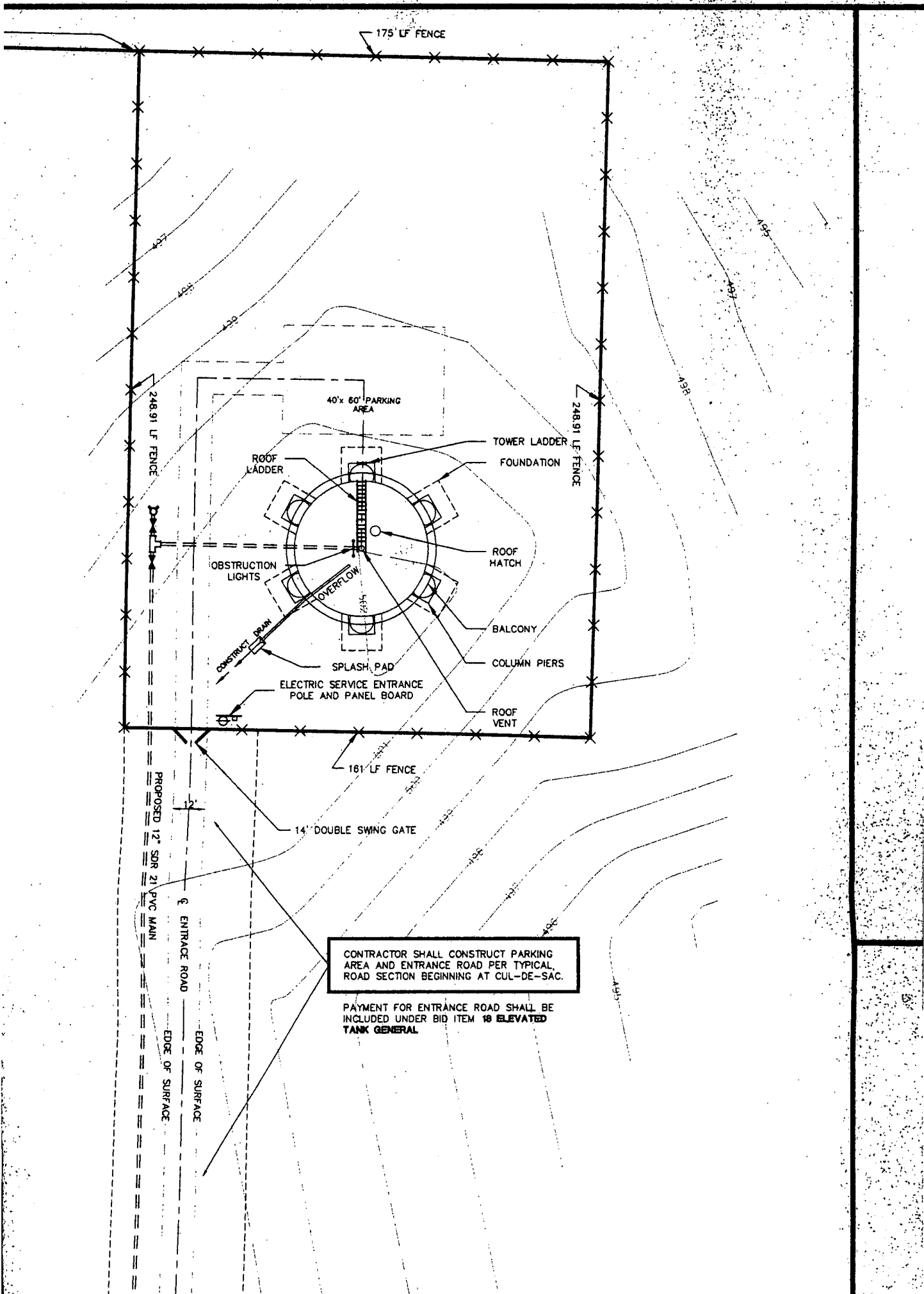
20' PUBLIC UTILITY EASEMENT

R.O.W.

TO U.S. HWY. 45

R.O.W.

PROPOSED 12" SDR 21 PVC MAIN



CONTRACTOR SHALL CONSTRUCT PARKING AREA AND ENTRANCE ROAD PER TYPICAL ROAD SECTION BEGINNING AT CUL-DE-SAC.

PAYMENT FOR ENTRANCE ROAD SHALL BE INCLUDED UNDER BID ITEM 18 ELEVATED TANK GENERAL

SITE PLAN
INDUSTRIAL PARK NO. 3 ELEVATED TANK
Scale : 1" = 30'

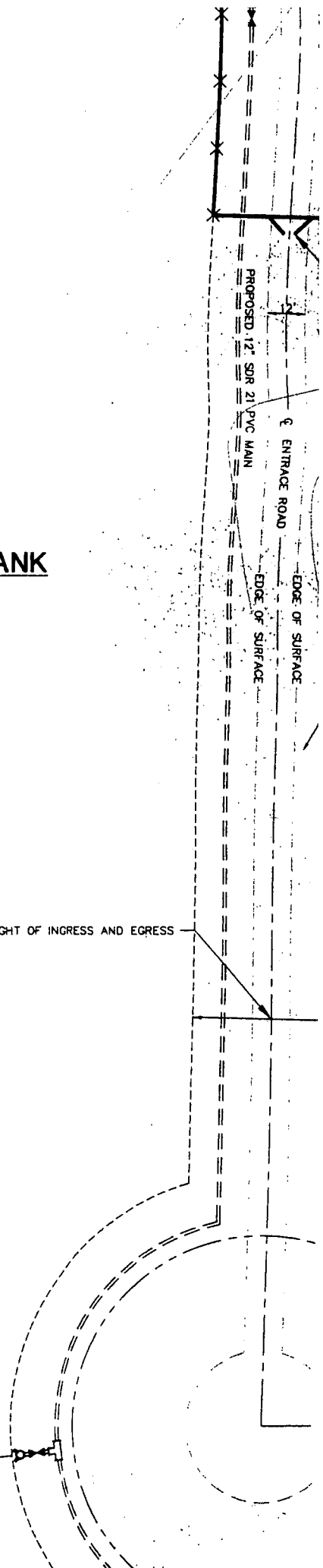
SPECIFICATIONS FOR PARKING AREA AND ENTRANCE ROAD

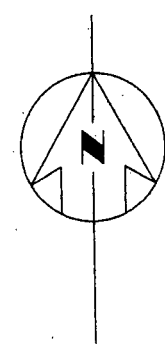
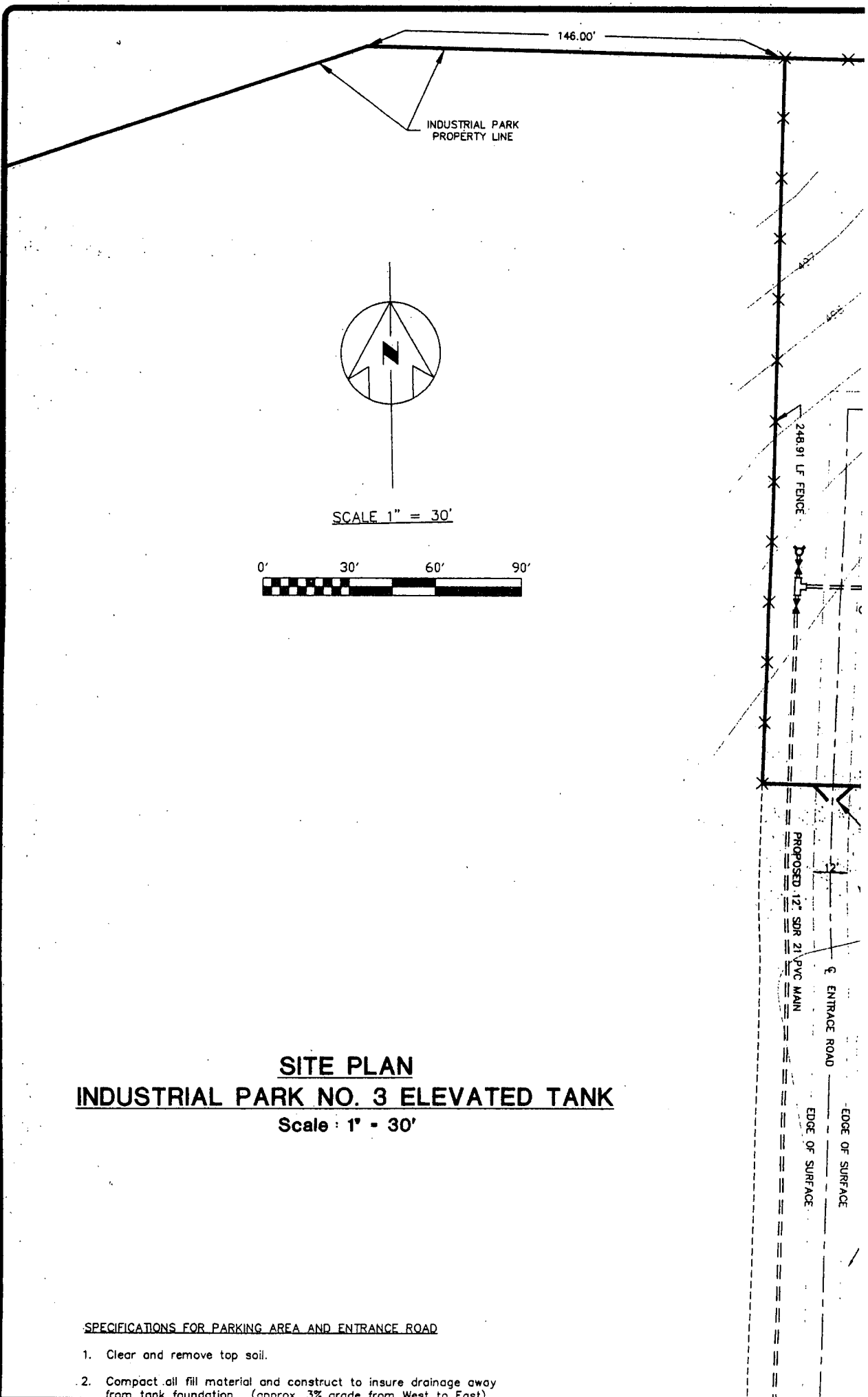
1. Clear and remove top soil.
2. Compact all fill material and construct to insure drainage away from tank foundation. (approx. 3% grade from West to East)
3. Surface course shall be 8" of compacted D.G.A.

NOTES:

1. LANDSCAPE ENTIRE SITE AND SEED WITH KY. 31 FESCUE PER SPECIFICATION 14.
2. ALL SITE WORK SHALL BE PERFORMED UNDER CONTRACT "A" WITH THE EXCEPTION OF THE ELEVATED TANK, FOUNDATIONS, TANK PIPING, BASE ELBOW, TANK ACCESSORIES, ETC. AS SPECIFIED.
3. SITE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF CONTRACT "A" INCLUDING PERMITS, FEES, SERVICE ENTRANCE POLE, ETC. AS SPECIFIED IN SPECIFICATION 7.
- 4) CONSTRUCT 425 L.F. OF 6' CHAIN LINK FENCE ON PROPERTY LINE WITH DBL. SW. GATE PER SPECIFICATION 14.

50' RIGHT OF INGRESS AND EGRESS





SCALE 1" = 30'

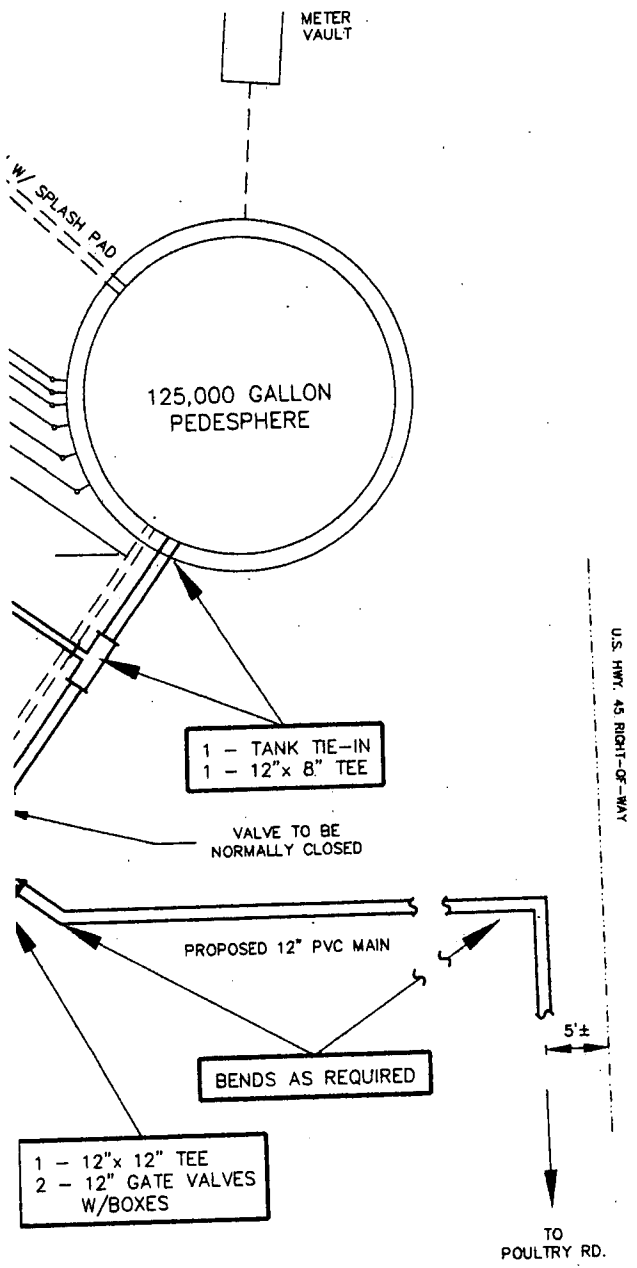


SITE PLAN
INDUSTRIAL PARK NO. 3 ELEVATED TANK

Scale : 1" = 30'

SPECIFICATIONS FOR PARKING AREA AND ENTRANCE ROAD

1. Clear and remove top soil.
2. Compact all fill material and construct to insure drainage away from tank foundation. (approx. 3% grade from West to East)



Drawn by:
JRJ

Checked by:
RHM

File:
HSI97A04

Date:
1/12/98

Revised:
4/22/98

TREATMENT BUILDING ADDITION
AND
SITE PLAN IMPROVEMENTS
HICKORY WATER DISTRICT

OLE -



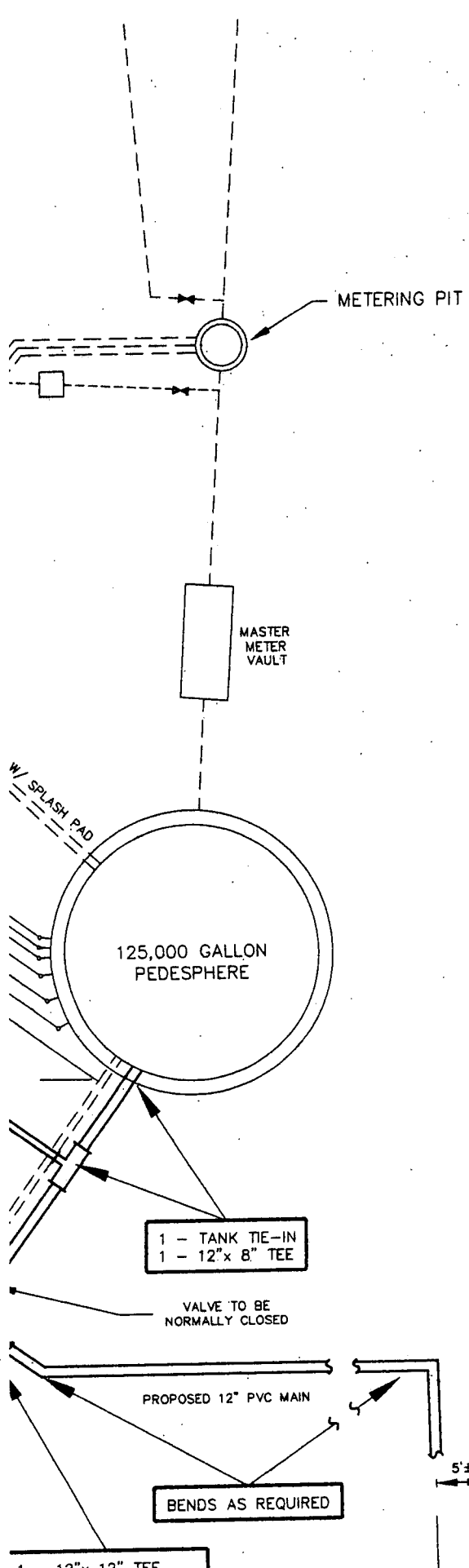
VE VAL



EDU

OF
RE
FI
FC

OF
AC
E'



HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
 3220 LONG OAK ROAD • PADUCAH, KENTUCKY 42003
 (502) 564-2737 • FAX (502) 564-2738



Drawn by:	JRJ
Checked by:	RHM
File:	HSI97A04
Date:	1/12/98
Revised:	4/22/98

ADDITION
 COMMENTS
 FRICT

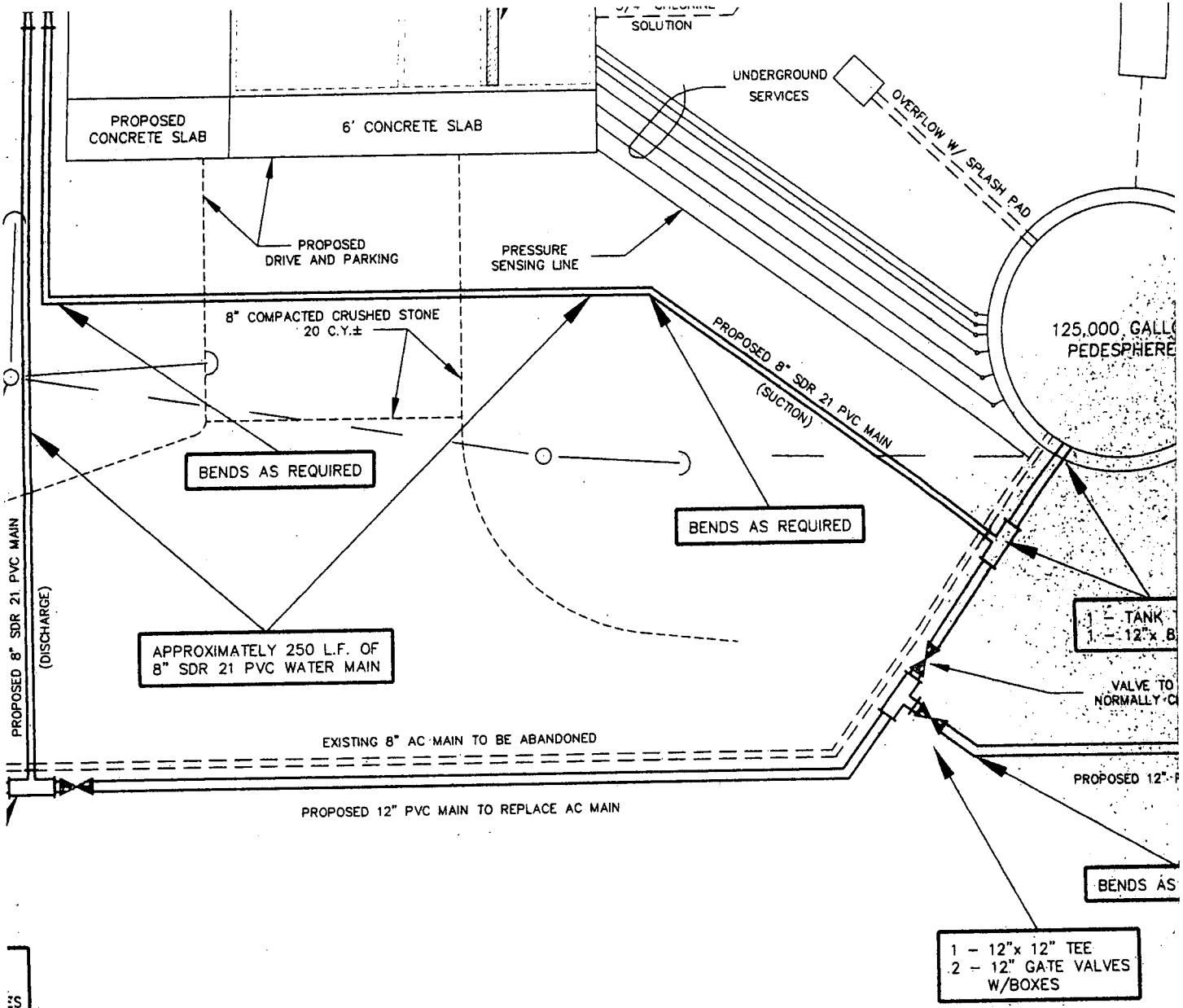
U.S. HWY. 43 RIGHT-OF-WAY

OLE -



5±

1 - 12" x 12" TEE



SITE PLAN DETAIL

SCALE: 1" = 10'

SHALL SCHEDULE HIS WORK
 AT THE PLANT SITE TO MINIMIZE
 DISTURBANCE THAT THE PEDISPHERE IS
 TIE-IN WITH NEW PVC MAIN.

SHALL GRADE SITE TO DIVERT
 DRAINAGE AWAY FROM

6" BYPASS MAIN

WATER TREATMENT
PLANT BUILDING

PROPOSED
ADDITION

CONTROL PANEL

1" LIME SOLUTION

1" FLUORIDE SOLUTION

3/4" CHLORINE
SOLUTION

PROPOSED
CONCRETE SLAB

6' CONCRETE SLAB

UNDERGROUND
SERVICES

OVERFLOW W/
SPLASH PAD

PROPOSED
DRIVE AND PARKING

PRESSURE
SENSING LINE

125,000 GALLON
PEDESHERE

8" COMPACTED CRUSHED STONE
20 C.Y.±

PROPOSED 8" SDR 21 PVC MAIN
(SUCTION)

BENDS AS REQUIRED

BENDS AS REQUIRED

APPROXIMATELY 250 L.F. OF
8" SDR 21 PVC WATER MAIN

1 - TANK
1 - 12" x 8"

VALVE TO
NORMALLY C

EXISTING 8" AC MAIN TO BE ABANDONED

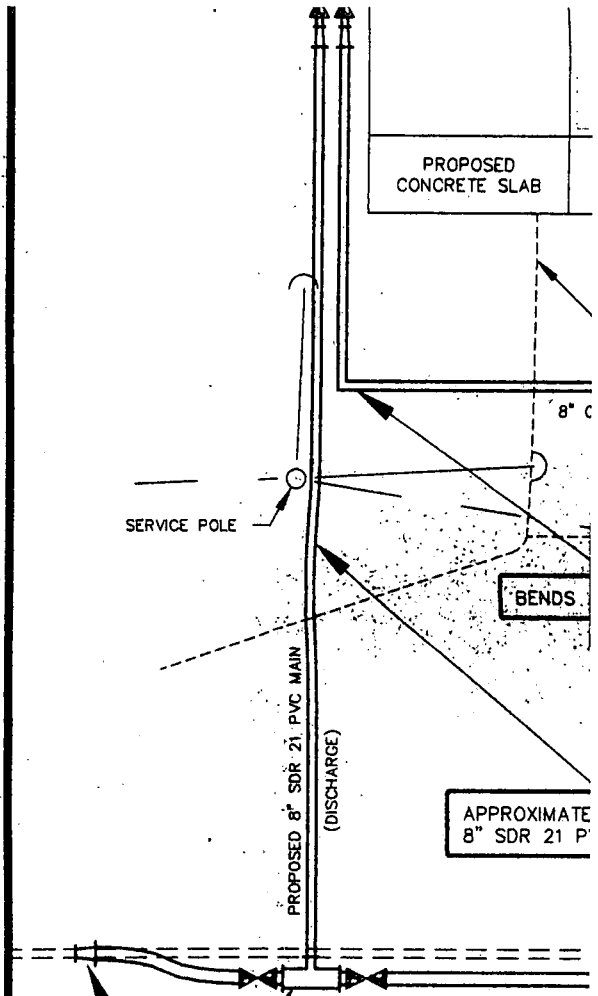
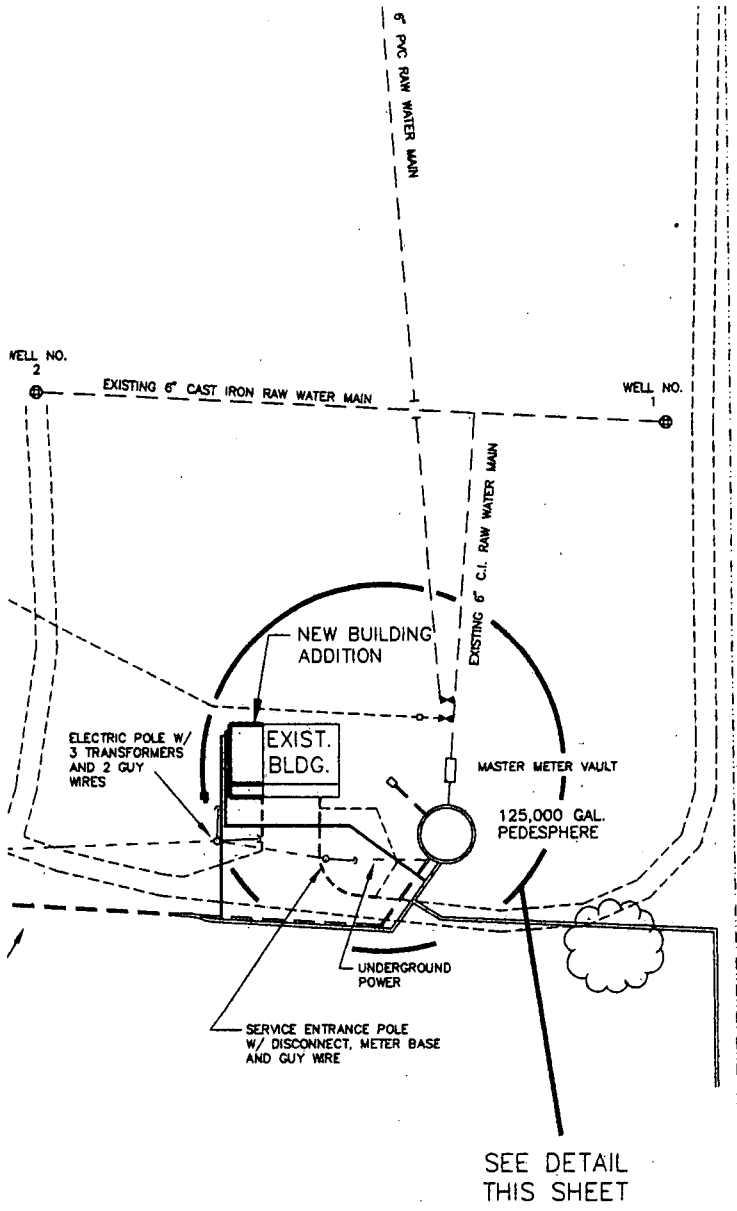
PROPOSED 12" PVC MAIN TO REPLACE AC MAIN

PROPOSED 12" F

BENDS AS

1 - 12" x 12" TEE

PROPOSED 8" SDR 21 PVC MAIN
(DISCHARGE)



- | | | |
|---|---|-------------------------|
| 1 | - | TIE-IN |
| 1 | - | 12" x 8" TEE |
| 2 | - | 12" GATE VALVES W/BOXES |
| 1 | - | 12" x 8" REDUCER |

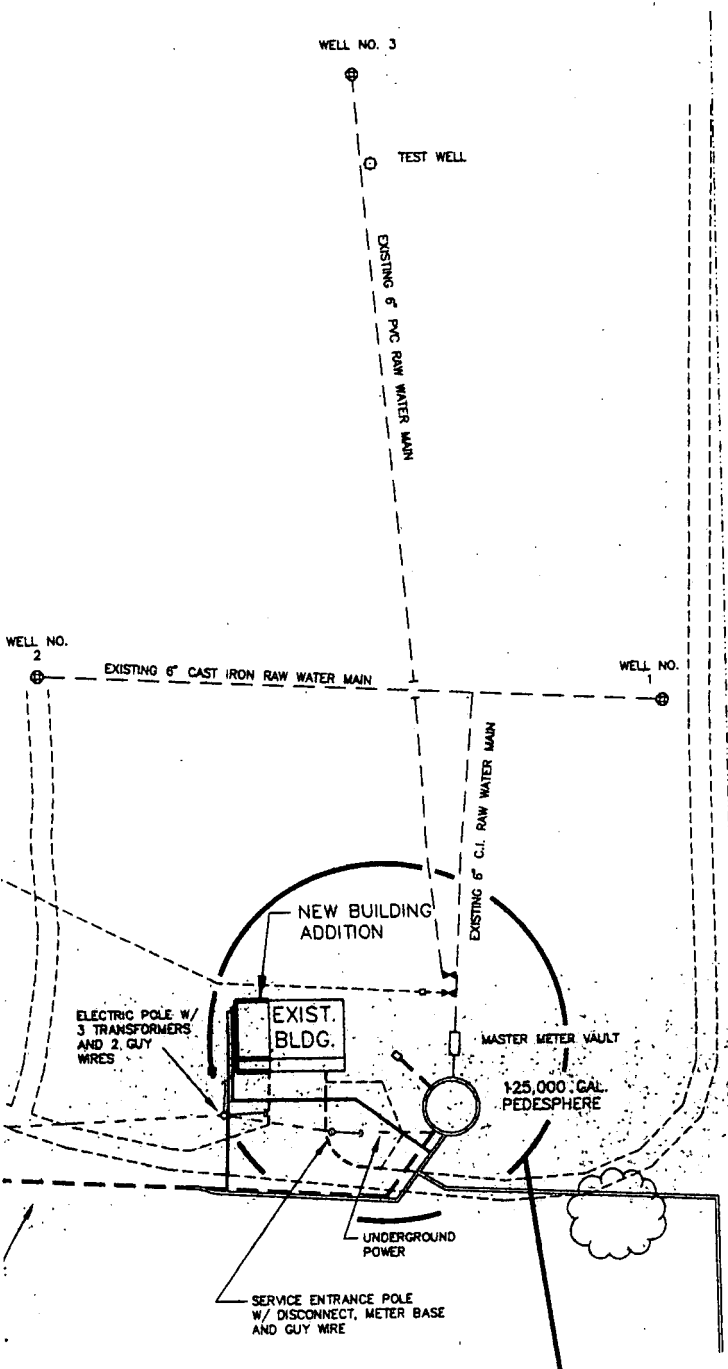
NOTES:

1. CONTRACTOR SHALL SCHEDULE HIS WORK AT THE TREATMENT PLANT SITE TO MINIMIZE THE TIME FRAME THAT THE PEDISPHERE IS OFF LINE FOR TIE-IN WITH NEW PVC MAIN.
2. CONTRACTOR SHALL GRADE SITE TO DIVERT ALL SURFACE DRAINAGE AWAY FROM STRUCTURES.

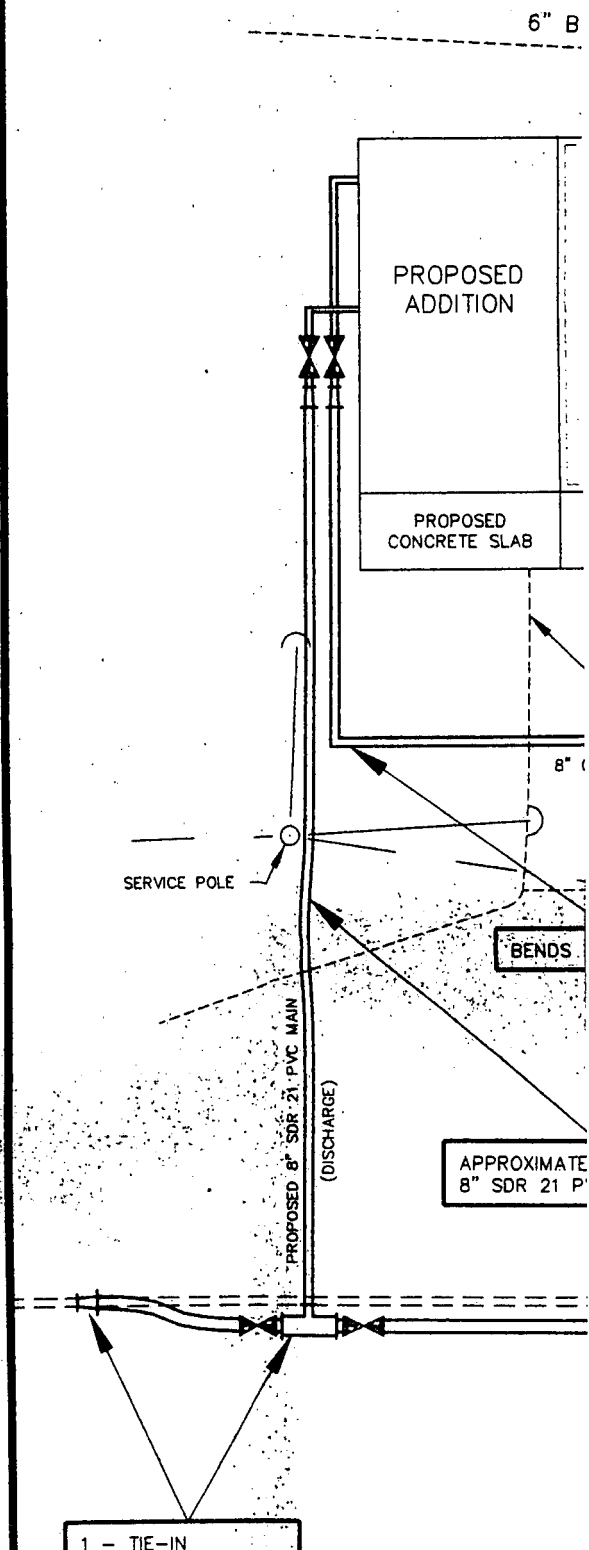
TREATMENT PLANT

PLAN

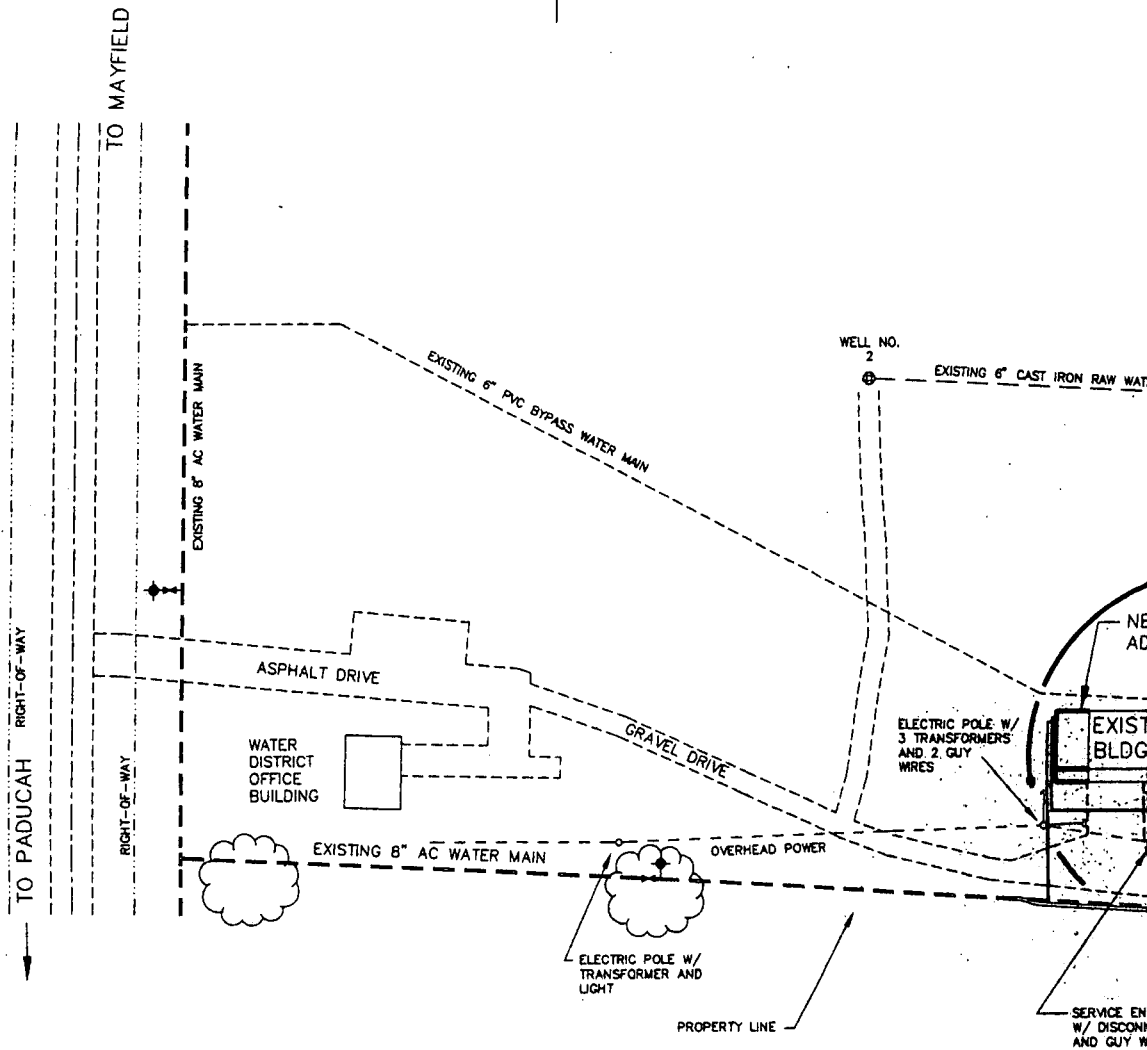
= 60'



U. S. HWY. 45



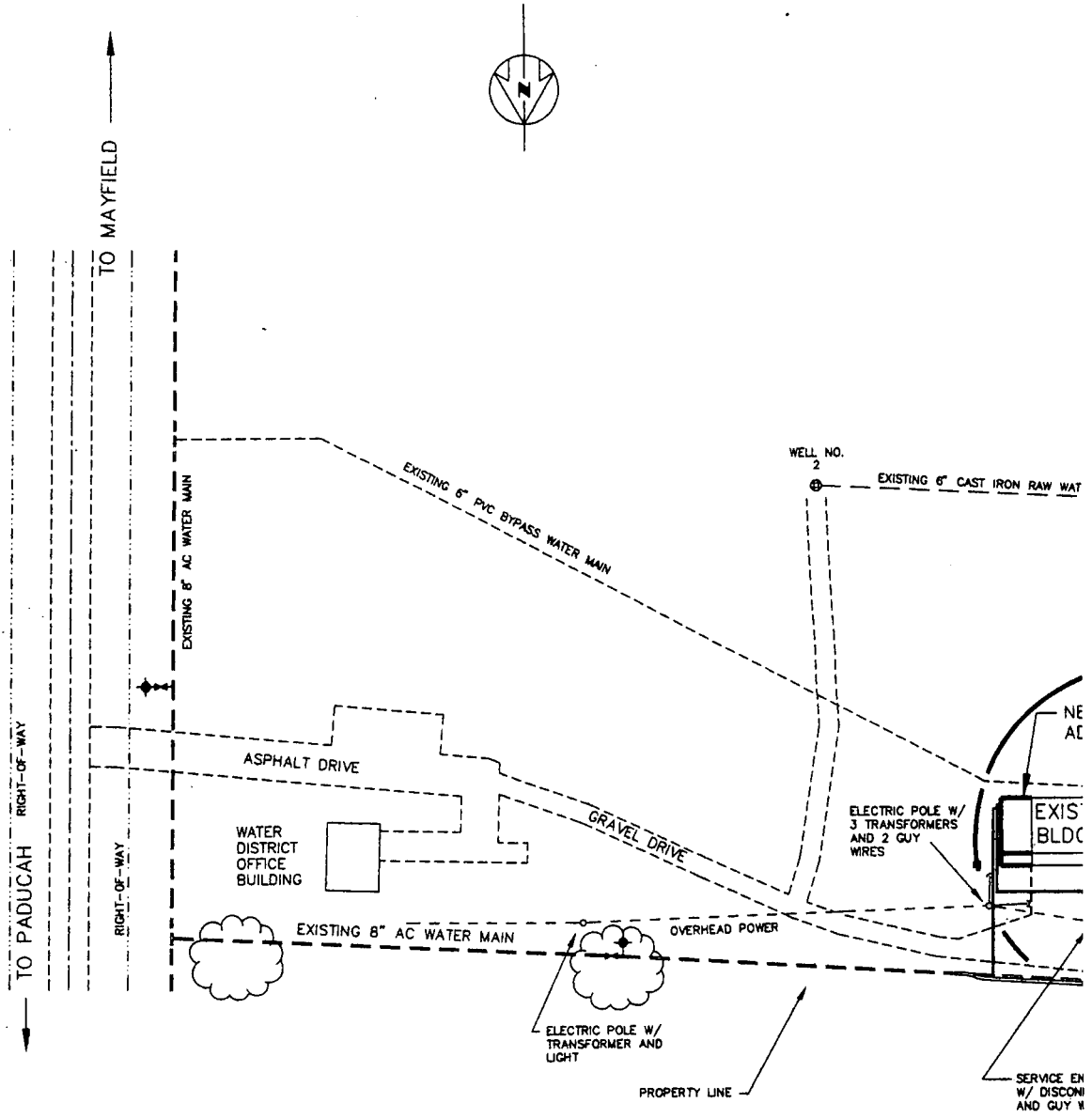
KY: HWY. 1241

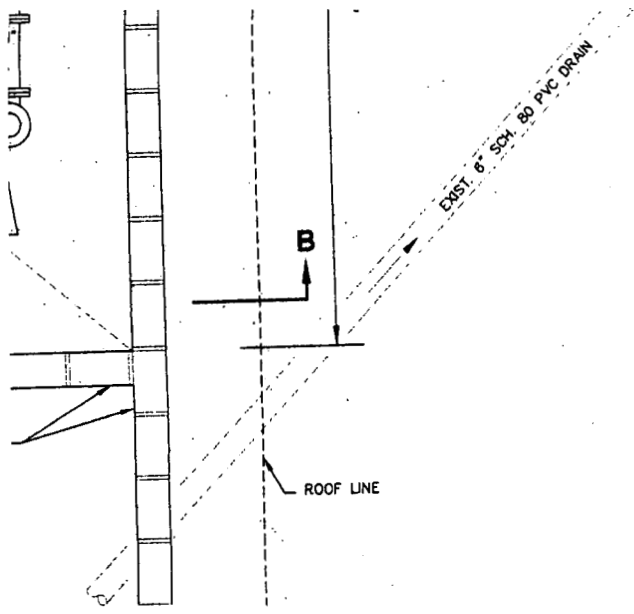


WATER TREATMENT PLANT
SITE PLAN

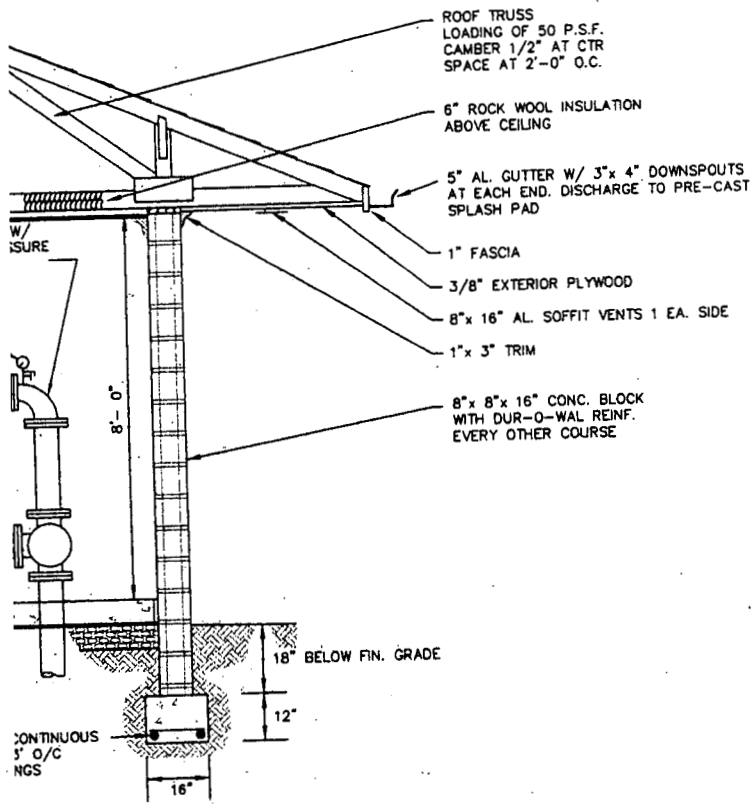
SCALE: 1" = 60'

KY. HWY. 1241





VENTILATOR
 H EXISTING
 R



H

Drawn by:
 JRJ

Checked by:
 RHM

File:
 HSI97A05

Date:
 1/12/98

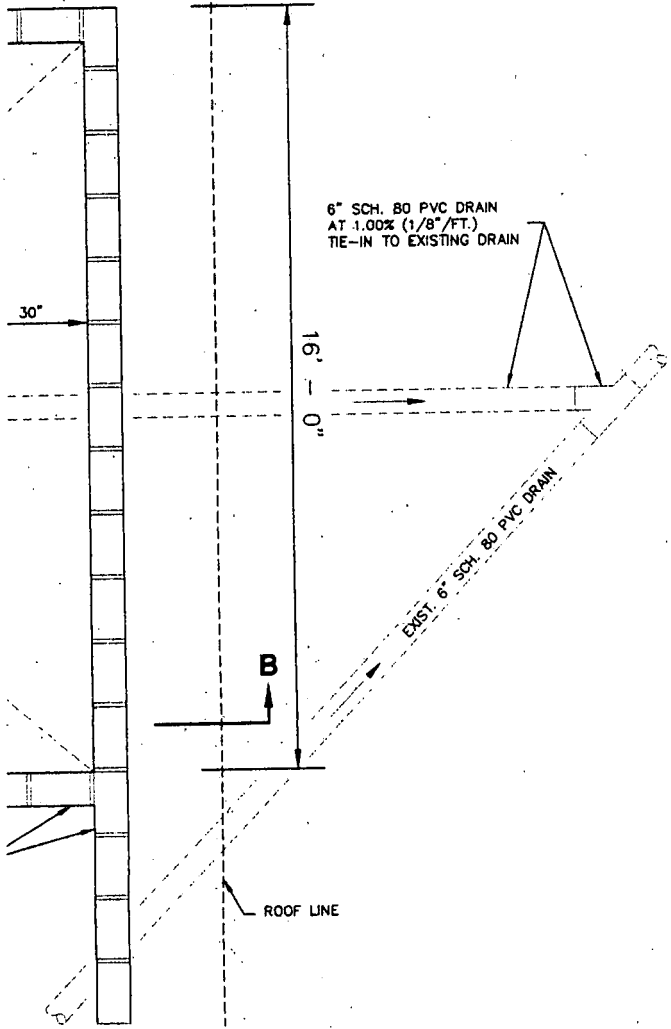
Revised:
 4/22/98

TREATMENT BUILDING ADDITION
 PUMPS
 AND PLUMBING DETAILS
 HICKORY WATER DISTRICT

DUCING
N JOINT

ER B'FLY. VA.

2 - 6" 1/4 BENDS



6" SCH. 80 PVC DRAIN
AT 1.00% (1/8"/FT.)
TIE-IN TO EXISTING DRAIN

16'-0"

EXIST. 6" SCH. 80 PVC DRAIN

ROOF LINE

TOR
LISTING

ROOF TRUSS
LOADING OF 50 P.S.F.
CAMBER 1/2" AT CTR
SPACE AT 2'-0" O.C.

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
(502) 554-2737 • FAX (502) 554-2738

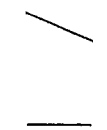
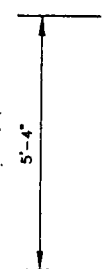
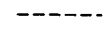
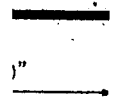


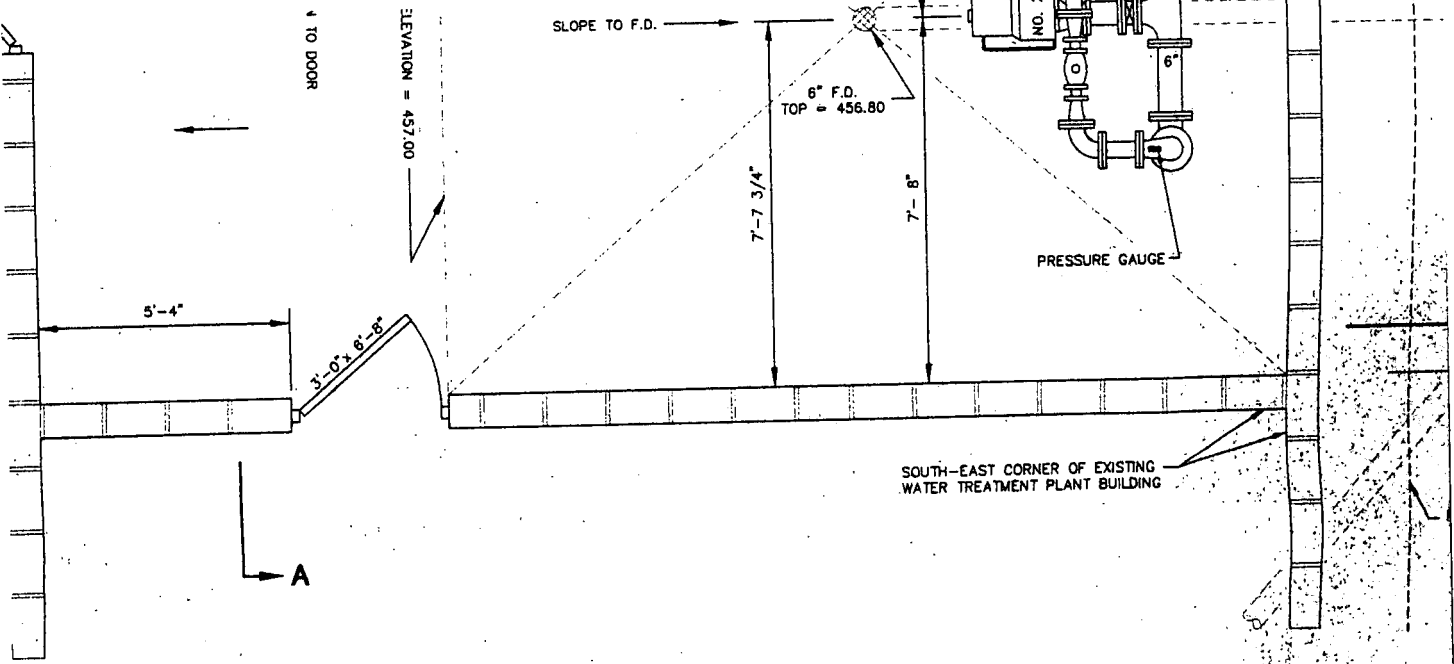
Drawn by:	JRJ
Checked by:	RHM
File:	HSI97A05
Date:	1/12/98
Revised:	4/22/98

ADDITION

AILS

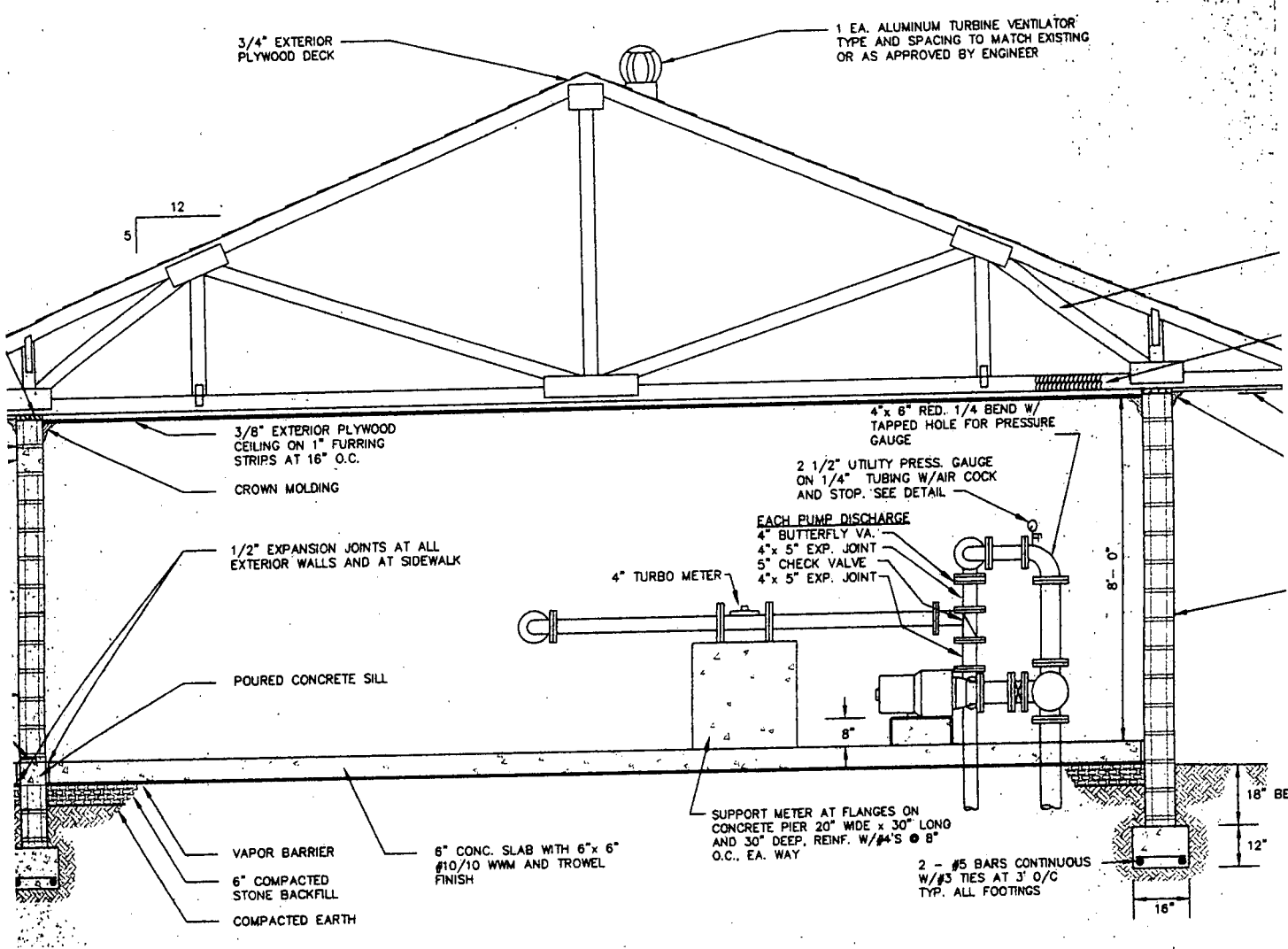
RICT





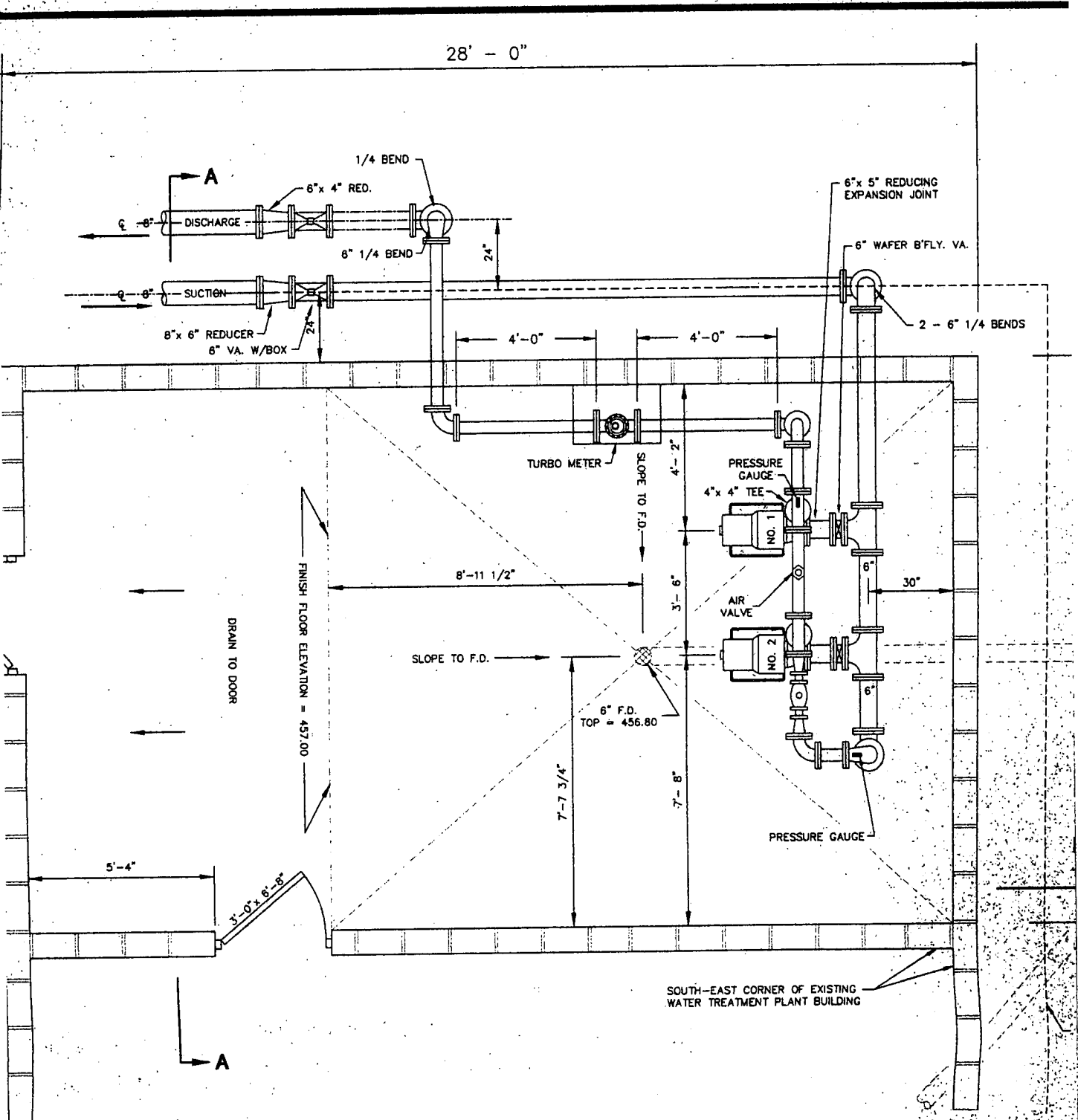
PLAN

SCALE : 3/8" = 1'-0"



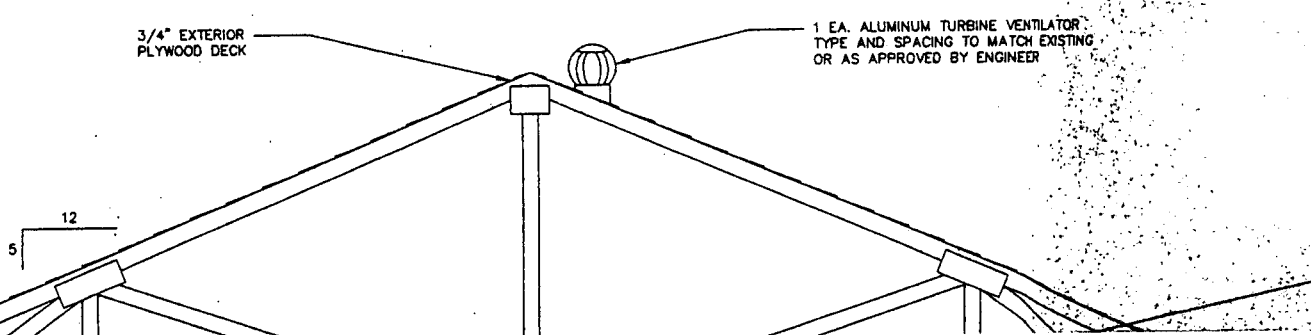
SECTION B-B

SCALE : 3/8" = 1'-0"



PLAN

SCALE : 3/8" = 1'-0"



3/4" EXTERIOR PLYWOOD DECK

1 EA. ALUMINUM TURBINE VENTILATOR
TYPE AND SPACING TO MATCH EXISTING
OR AS APPROVED BY ENGINEER

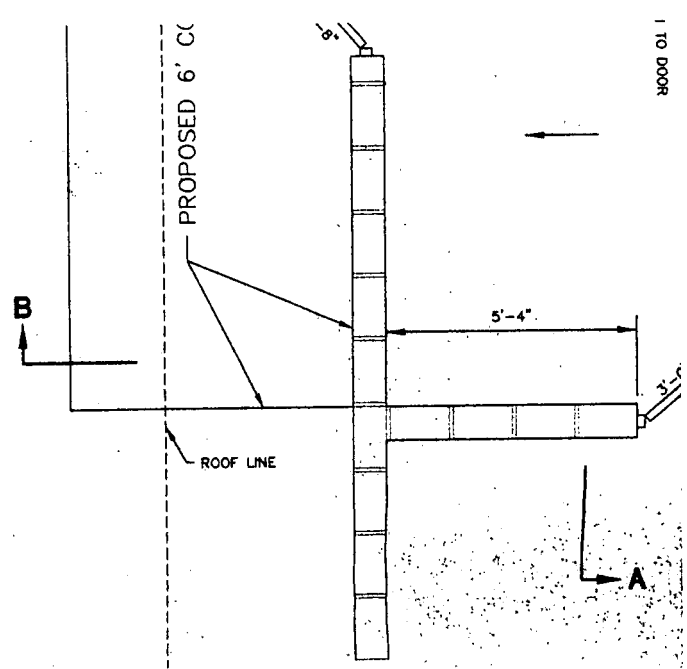
RACTOR

RESTRAINED.

STRUCTURE
PAYMENT

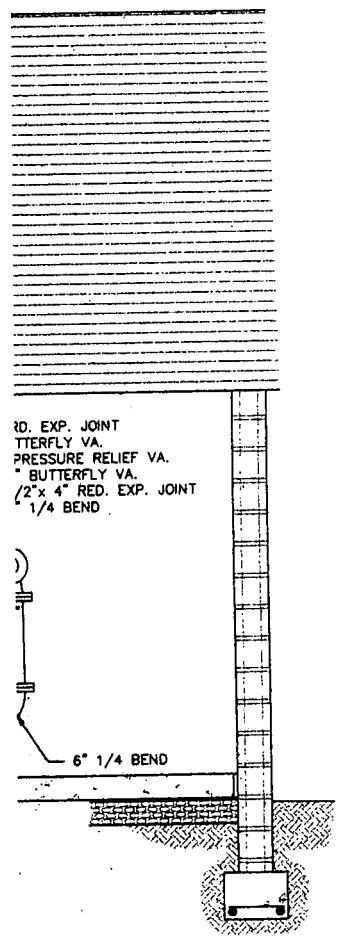
WITH 2"
I HAVE
NDS.

ALL BE PAINTED
COLOR AS NEAR

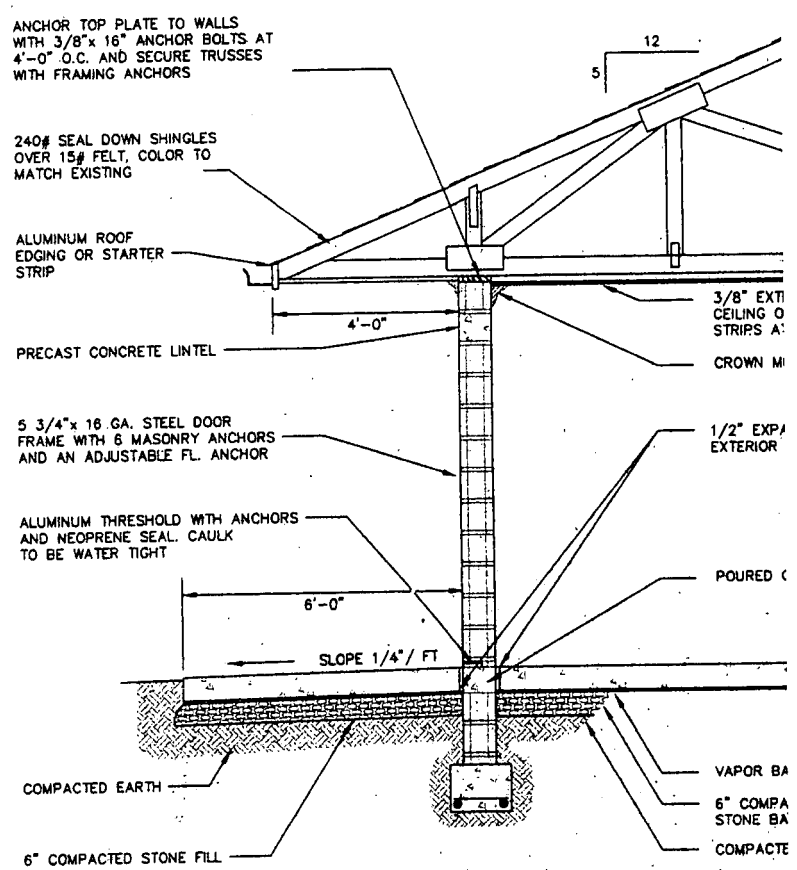


TO DOOR

3/4" EX
PLYWOOD



RD. EXP. JOINT
 TTERFLY VA.
 PRESSURE RELIEF VA.
 BUTTERFLY VA.
 2" x 4" RED. EXP. JOINT
 1/4 BEND



ANCHOR TOP PLATE TO WALLS
 WITH 3/8" x 16" ANCHOR BOLTS AT
 4'-0" O.C. AND SECURE TRUSSES
 WITH FRAMING ANCHORS

240# SEAL DOWN SHINGLES
 OVER 15# FELT, COLOR TO
 MATCH EXISTING

ALUMINUM ROOF
 EDGING OR STARTER
 STRIP

PRECAST CONCRETE LINTEL

5 3/4" x 16 GA. STEEL DOOR
 FRAME WITH 6 MASONRY ANCHORS
 AND AN ADJUSTABLE FL. ANCHOR

ALUMINUM THRESHOLD WITH ANCHORS
 AND NEOPRENE SEAL. CAULK
 TO BE WATER TIGHT

COMPACTED EARTH

6" COMPACTED STONE FILL

3/8" EXT
 CEILING O
 STRIPS A
 CROWN MI

1/2" EXP
 EXTERIOR

POURED C

VAPOR BA
 6" COMPA
 STONE BA
 COMPACTE

4'-0"

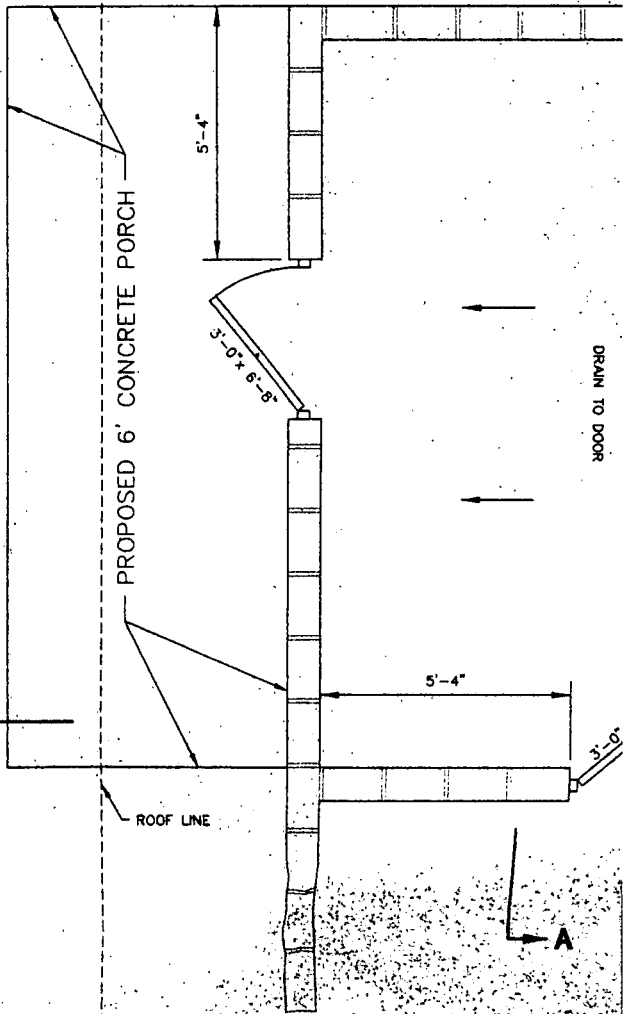
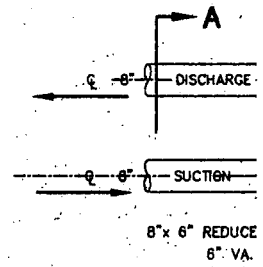
6'-0"

SLOPE 1/4" / FT

12

5

6' - 0"

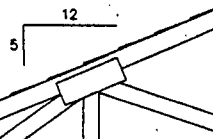


ACTOR
/RESTRAINED.
STRUCTURE
PAYMENT
WITH 2"
L HAVE
NDS.
ALL BE PAINTED
COLOR AS NEAR

3/4" EXTE
PLYWOOD I

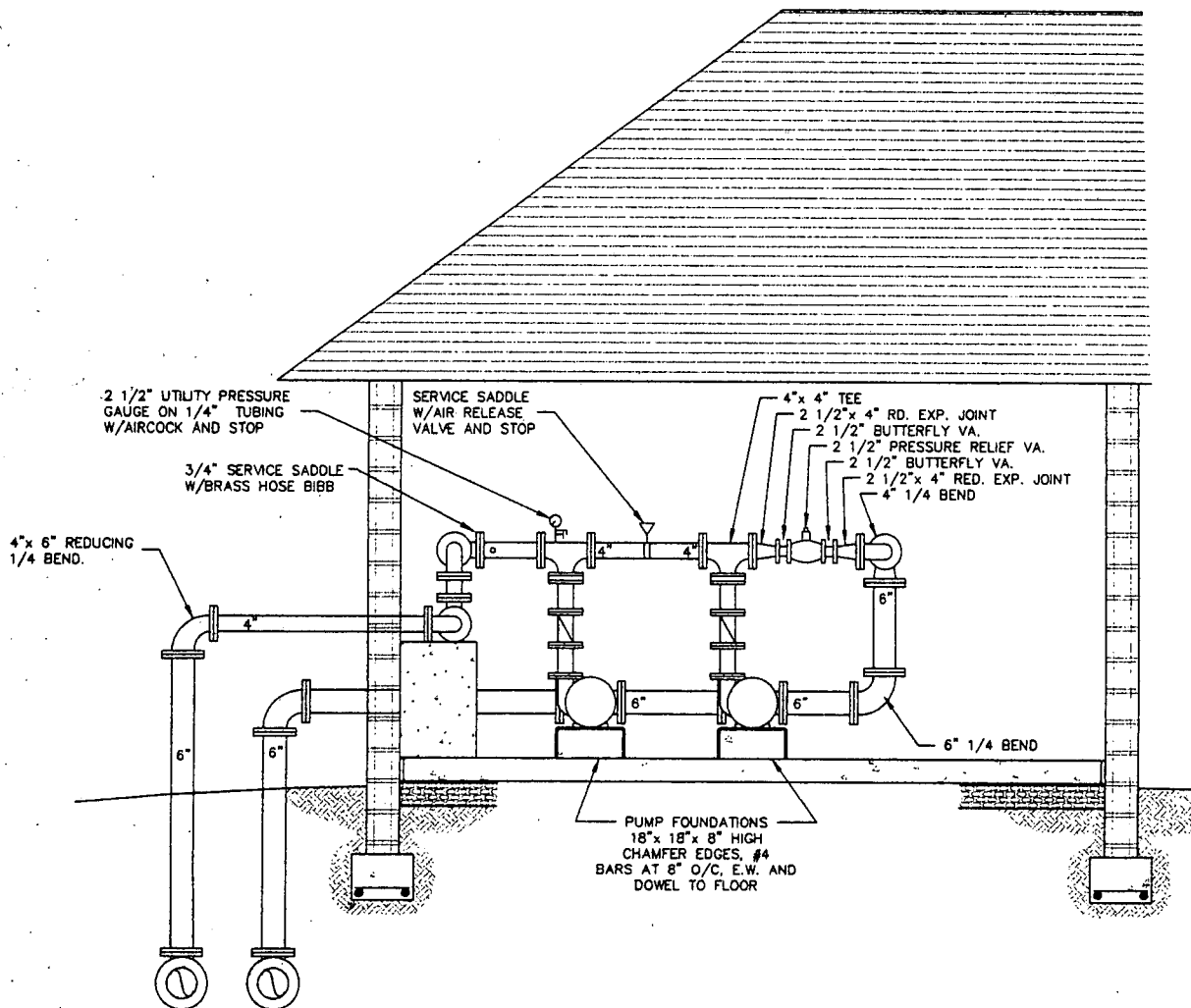
ANCHOR TOP PLATE TO WALLS
WITH 3/8" x 16" ANCHOR BOLTS AT
4'-0" O.C. AND SECURE TRUSSES
WITH FRAMING ANCHORS

240# SEAL DOWN SHINGLES
OVER 15# FELT, COLOR TO
MATCH EXISTING



NOTES:

1. EXACT PIPING DIMENSIONS TO BE ESTABLISHED BY CONTRACTOR FROM ACTUAL MATERIALS AND CERTIFIED DRAWINGS.
2. ALL PIPING AND EXPANSION JOINTS SHALL BE ANCHORED/RESTRAINED.
3. ALL PIPING INSIDE AND TO A POINT 5' OUTSIDE OF THE STRUCTURE WALLS SHALL BE FLANGED AND SHALL BE DUCTILE IRON. PAYMENT SHALL BE INCLUDED IN BID ITEM 18.
4. ALL PIPING SUBJECT TO FREEZING SHALL BE INSULATED WITH 2" FIBERGLASS MOISTURE-RESISTANT INSULATION AND SHALL HAVE 0.016 GA. ALUMINUM JACKETING W/ 3/8" ALUMINUM BANDS.
5. ALL NEW EXPOSED MASONRY WALLS AND WOODWORK SHALL BE PAINTED (3 COATS) PER SPEC. 13 AND SHALL MATCH EXISTING COLOR AS NEAR AS POSSIBLE AS APPROVED BY THE ENGINEER.
6. ALL BUILDING MATERIALS SHALL MATCH EXISTING UNLESS SHOWN OTHERWISE OR APPROVED BY THE ENGINEER.
7. ALL BLOCK CORES OF OUTSIDE WALLS SHALL BE FILLED WITH LIGHTWEIGHT AGGREGATE INSULATING MATERIAL.
8. LANDSCAPE ALL UNIMPROVED AREAS AND SEED WITH A CERTIFIED LAWN MIXTURE PER SPECIFICATION 14-2.
9. LABORATORY FINISHED FLOOR ELEVATION = 457.00 (NORTHWEST CORNER OF EXISTING BUILDING)



SECTION A-A

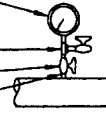
SCALE : 3/8" = 1'-0"

2 1/2" UTILITY PRESSURE
GAUGE, 0-160 P.S.I.

AIR COCK

STOP

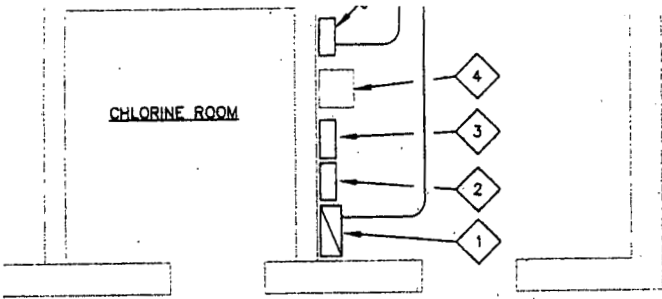
1/4" TUBING



PRESSURE GAUGE DETAIL

NOTES:

1. EXACT PIPING DIMENSIONS TO BE ESTABLISHED BY CONTRACTOR FROM ACTUAL MATERIALS AND CERTIFIED DRAWINGS.
2. ALL PIPING AND EXPANSION JOINTS SHALL BE ANCHORED/RESTRAINED.
3. ALL PIPING INSIDE AND TO A POINT 5' OUTSIDE OF THE STRUCTURE WALLS SHALL BE FLANGED AND SHALL BE DUCTILE IRON. PAYMENT SHALL BE INCLUDED IN BID ITEM 18.
4. ALL PIPING SUBJECT TO FREEZING SHALL BE INSULATED WITH 2" FIBERGLASS MOISTURE-RESISTANT INSULATION AND SHALL HAVE 0.016 GA. ALUMINUM JACKETING W/ 3/8" ALUMINUM BANDS.
5. ALL NEW EXPOSED MASONRY WALLS AND WOODWORK SHALL BE PAINTED (3 COATS) PER SPEC. 13 AND SHALL MATCH EXISTING COLOR AS NEAR AS POSSIBLE AS APPROVED BY THE ENGINEER.
6. ALL BUILDING MATERIALS SHALL MATCH EXISTING UNLESS SHOWN OTHERWISE OR APPROVED BY THE ENGINEER.
7. ALL BLOCK CORES OF OUTSIDE WALLS SHALL BE FILLED WITH LIGHTWEIGHT AGGREGATE INSULATING MATERIAL.
8. LANDSCAPE ALL UNIMPROVED AREAS AND SEED WITH A CERTIFIED LAWN MIXTURE PER SPECIFICATION 14-2.
9. LABORATORY FINISHED FLOOR ELEVATION = 457.00 (NORTHWEST CORNER OF EXISTING BUILDING)



TRICAL NOTES:

EXISTING PANEL "M" SQ. D, I-LINE, SERVICE DISCONNECT BOARD.
 NSTALL A NEW 3P100A BREAKER, LABEL "SERVICE DISCONNECT 1 OF 3"
 AND CONNECT FEEDER TO SUPPLY NEW PUMP CONTROL PANEL.

EXISTING METERING EQUIPMENT TO REMAIN.

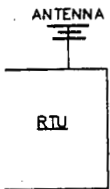
EXISTING MOTOR CONTROL CENTER TO REMAIN.

EXISTING 480V PRI/120/208V SEC. TRANSFORMER TO REMAIN.

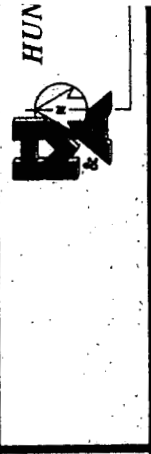
EXISTING PANEL "A" SQ. D TYPE QO, 120/208V, 100A BRANCH PANEL.
 INSTALL 1P20A CIRCUIT BREAKERS IN SPACES #38, #40 AND #42 TO SUPPLY
 NEW CIRCUITS AS INDICATED. REVISE PANEL INDEX TO REFLECT NEW CIRCUITS.

NEW FEEDER TO PUMP CONTROL PANEL, 3-#3'S, 1-#8 GND., 1-#10 NEU. IN
 1 1/4" CONDUIT.

NEW BRANCH CIRCUITS TO SUPPLY 120V LOADS.

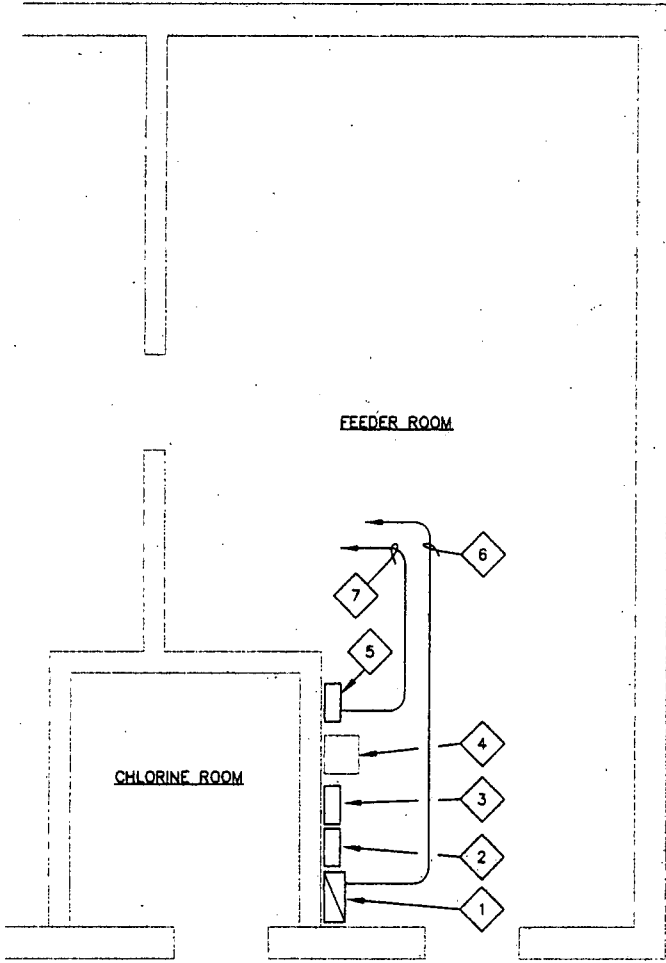


JEL



Drawn by:	JRJ
Checked by:	RHM
File:	HSI97A06
Date:	1/12/98
Revised:	4/22/98

TREATMENT BUILDING ADDITION
 AND
 ELECTRICAL DETAILS
 HICKORY WATER DISTRICT



HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
 3220 LONG OAK ROAD • PADUCAH, KENTUCKY 42003
 (502) 554-2737 • FAX (502) 554-2738



Drawn by: JRJ
Checked by: RHM
File: HSI97A06
Date: 1/12/98
Revised: 4/22/98

ELECTRICAL NOTES:

EXISTING PANEL "M" SQ. D, I-LINE, SERVICE DISCONNECT BOARD.
 INSTALL A NEW 3P100A BREAKER, LABEL "SERVICE DISCONNECT 1 OF 3"
 AND CONNECT FEEDER TO SUPPLY NEW PUMP CONTROL PANEL.

EXISTING METERING EQUIPMENT TO REMAIN.

EXISTING MOTOR CONTROL CENTER TO REMAIN.

EXISTING 480V PRI/120/208V SEC. TRANSFORMER TO REMAIN.

EXISTING PANEL "A" SQ. D TYPE QO, 120/208V, 100A BRANCH PANEL.
 INSTALL 1P20A CIRCUIT BREAKERS IN SPACES #38, #40 AND #42 TO SUPPLY
 NEW CIRCUITS AS INDICATED. REVISE PANEL INDEX TO REFLECT NEW CIRCUITS.

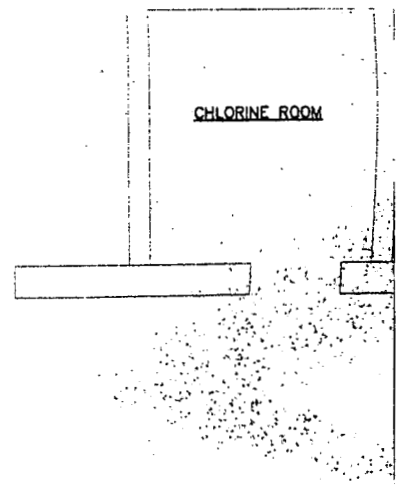
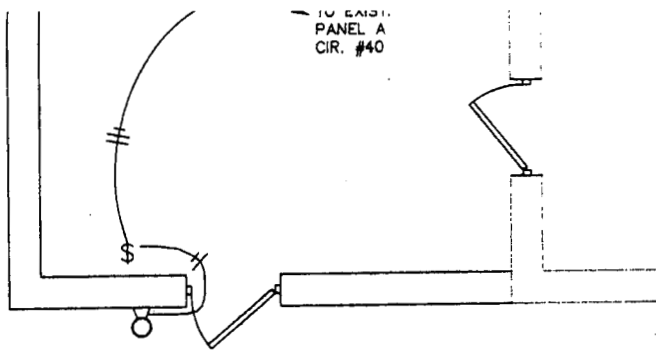
NEW FEEDER TO PUMP CONTROL PANEL. 3-#3'S, 1-#8 GND., 1-#10 NEU. IN
 1 1/4" CONDUIT.

NEW BRANCH CIRCUITS TO SUPPLY 120V LOADS.

ADDITION

LS

RICT

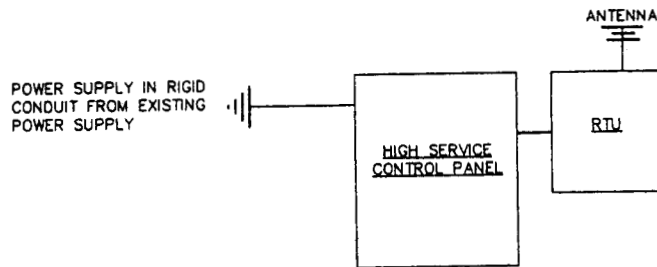


LEGEND

SYMBOL	DESCRIPTION
□ "A"	FLUORESCENT LITHONIA, CAT. NO. C-240-120-HC, 4-40 W/RS LAMPS SURFACE MTD AT CEILING
⊙	WALL MOUNTED LIGHTING FIXTURE, MCGRAW-EDISON, CAT. NO. 4132-V WITH BUILT-IN PHOTOCONTROL, 1-70-W HPS LAMP, WALL MTD AT 7'-6" TO BOTTOM ABOVE CONCRETE
\$	WALL SWITCH AT 48" ABOVE FLOOR (TO BOTTOM)
⊕	DUPLEX OUTLET AT 42" ABOVE FLOOR (TO BOTTOM)
⊞	THERMOSTAT AT 60" ABOVE FLOOR
⊙	JUNCTION BOX
—	CONDUIT, EXPOSED ON WALL OR CEILING
- - -	CONDUIT, UNDER SLAB
⋯	FLEXIBLE CONDUIT

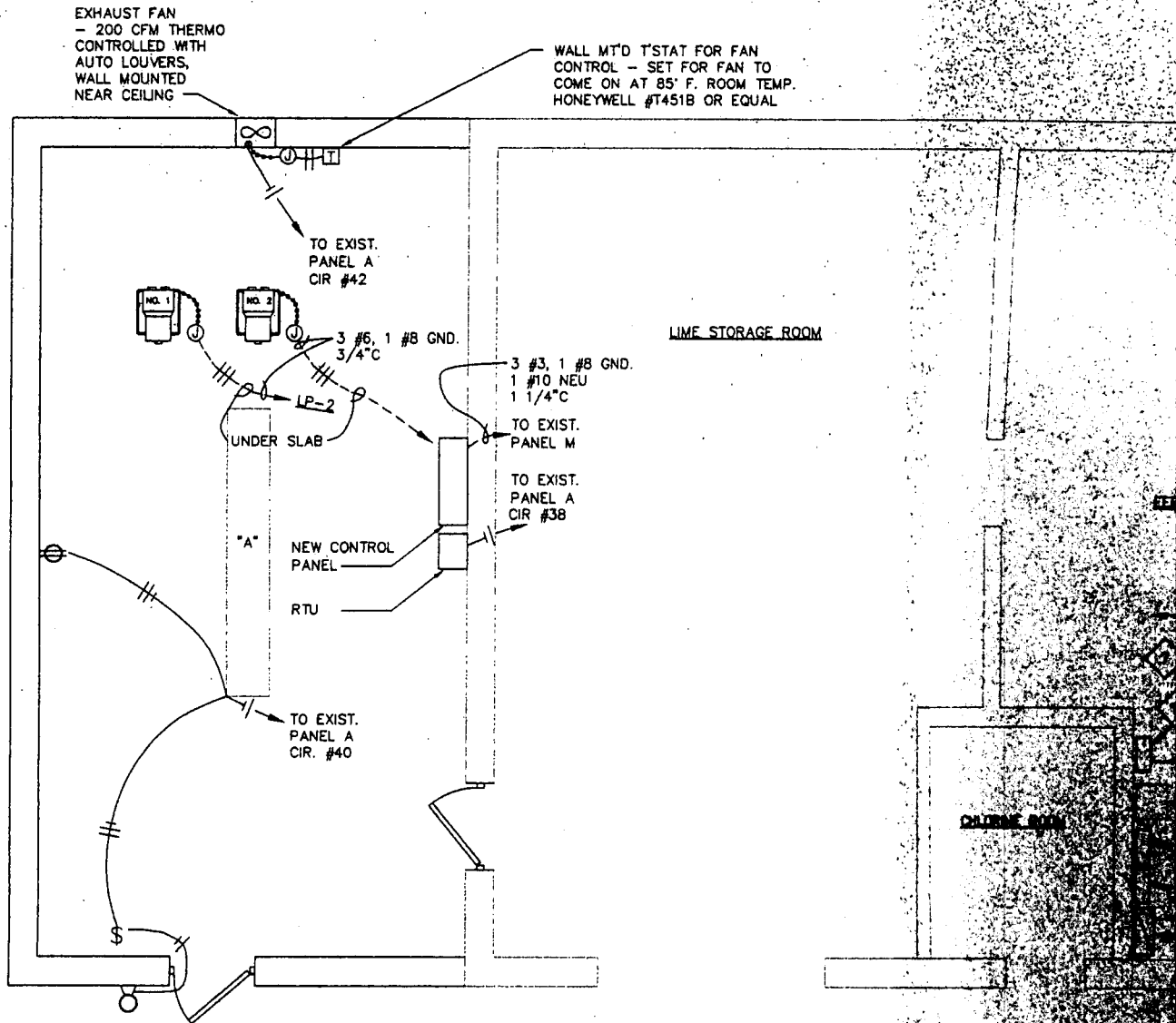
ELECTRICAL NOTES:

1. EXISTING PANEL "M" SQ. D, 1-LINE, SI INSTALL A NEW 3P100A BREAKER, LAE AND CONNECT FEEDER TO SUPPLY NEI
2. EXISTING METERING EQUIPMENT TO RE
3. EXISTING MOTOR CONTROL CENTER TC
4. EXISTING 480V PRI/120/208V SEC. TI
5. EXISTING PANEL "A" SQ. D TYPE OO, INSTALL 1P20A CIRCUIT BREAKERS IN NEW CIRCUITS AS INDICATED. REVISE
6. NEW FEEDER TO PUMP CONTROL PAN 1 1/4" CONDUIT.
7. NEW BRANCH CIRCUITS TO SUPPLY 1:



CONTROL PANEL

NO SCALE



LEGEND

SYMBOL	DESCRIPTION
□ "A"	FLUORESCENT LITHONIA, CAT. NO. C-240-120-HC, 4-40 W/RS LAMPS SURFACE MTD AT CEILING
⊙	WALL MOUNTED LIGHTING FIXTURE, MCGRAW-EDISON, CAT. NO. 4132-V WITH BUILT-IN PHOTOCONTROL, 1-70-W HPS LAMP, WALL MTD AT 7'-8" TO BOTTOM ABOVE CONCRETE
\$	WALL SWITCH AT 48" ABOVE FLOOR (TO BOTTOM)
⊕	DUPLEX OUTLET AT 42" ABOVE FLOOR (TO BOTTOM)
⊠	THERMOSTAT AT 60" ABOVE FLOOR
⊙	JUNCTION BOX
—	CONDUIT, EXPOSED ON WALL OR CEILING
- - -	CONDUIT, UNDER SLAB
—•—•—	FLEXIBLE CONDUIT

ELECTRICAL NOTES:

- EXISTING PANEL "M" SQ. D, I-LINE, SERVICE. INSTALL A NEW 3P100A BREAKER, LABEL "T" AND CONNECT FEEDER TO SUPPLY NEW PUMP.
- EXISTING METERING EQUIPMENT TO REMAIN.
- EXISTING MOTOR CONTROL CENTER TO REMAIN.
- EXISTING 480V PRI/120/208V SEC. TRANS.
- EXISTING PANEL "A" SQ. D TYPE OO, 120V, INSTALL 1P20A CIRCUIT BREAKERS IN SPACE FOR NEW CIRCUITS AS INDICATED. REVISE PANEL SCHEDULE.
- NEW FEEDER TO PUMP CONTROL PANEL, 1 1/4" CONDUIT.
- NEW BRANCH CIRCUITS TO SUPPLY 120V.

EXHAUST
- 200 C
CONTROL
AUTO LOI
WALL MO
NEAR CEI

36'-0"

30'-0"

13 EXISTING TRUSSES

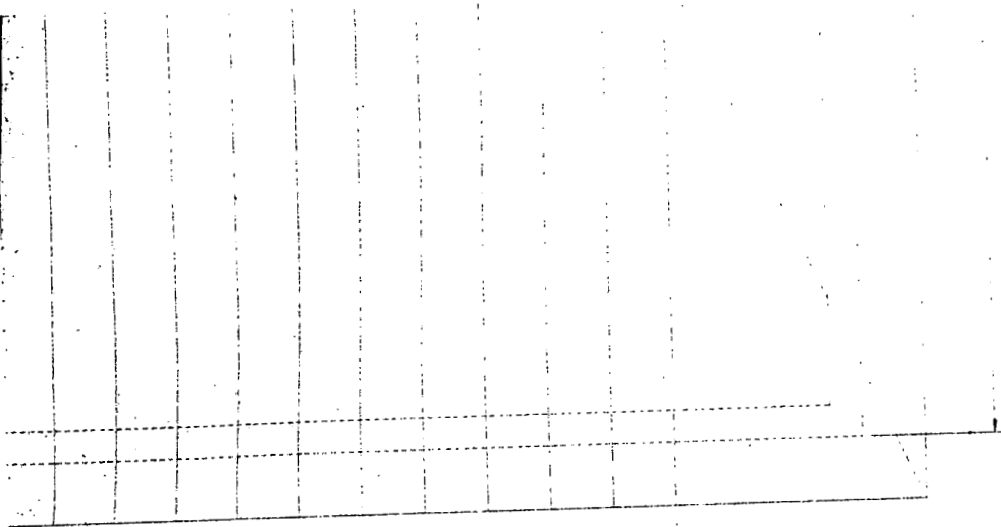


SYMBOL

1. A

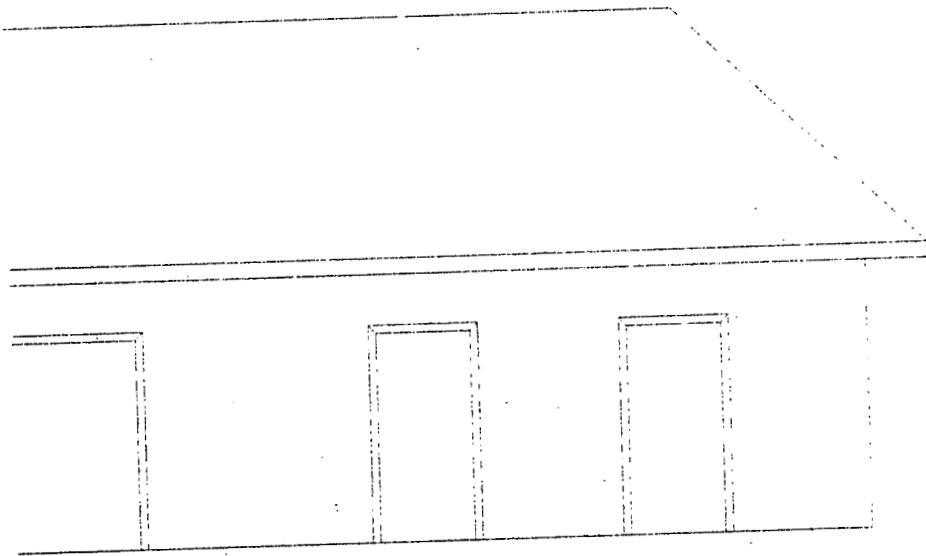


FRAMING PLAN

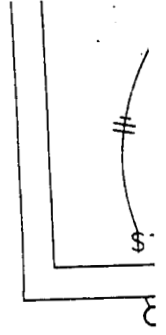


3 EXISTING TRUSSES

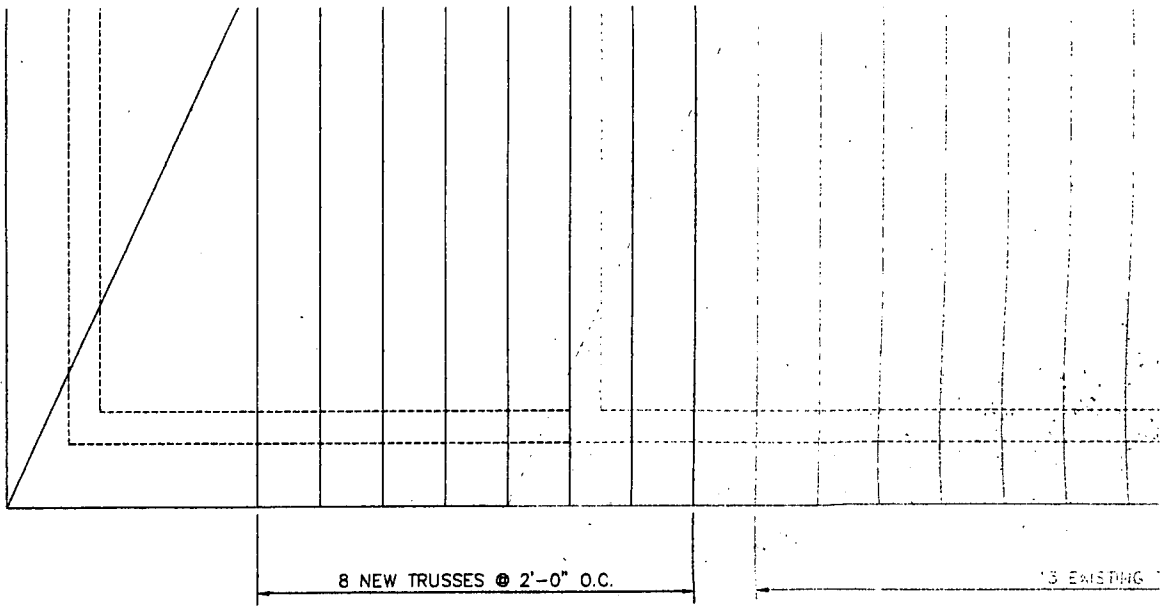
FRAMING PLAN



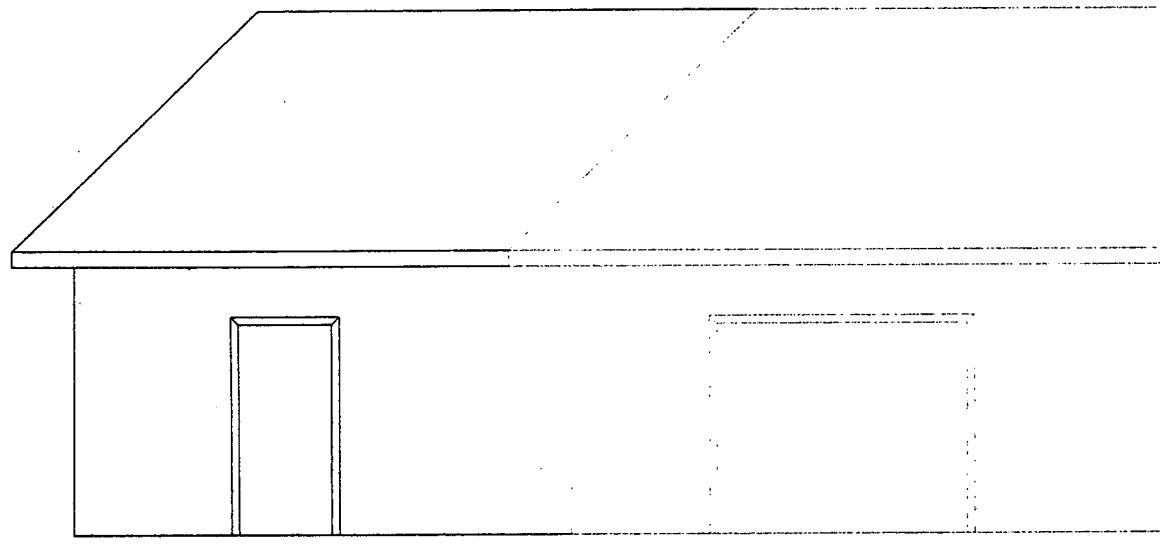
1 ELEVATION



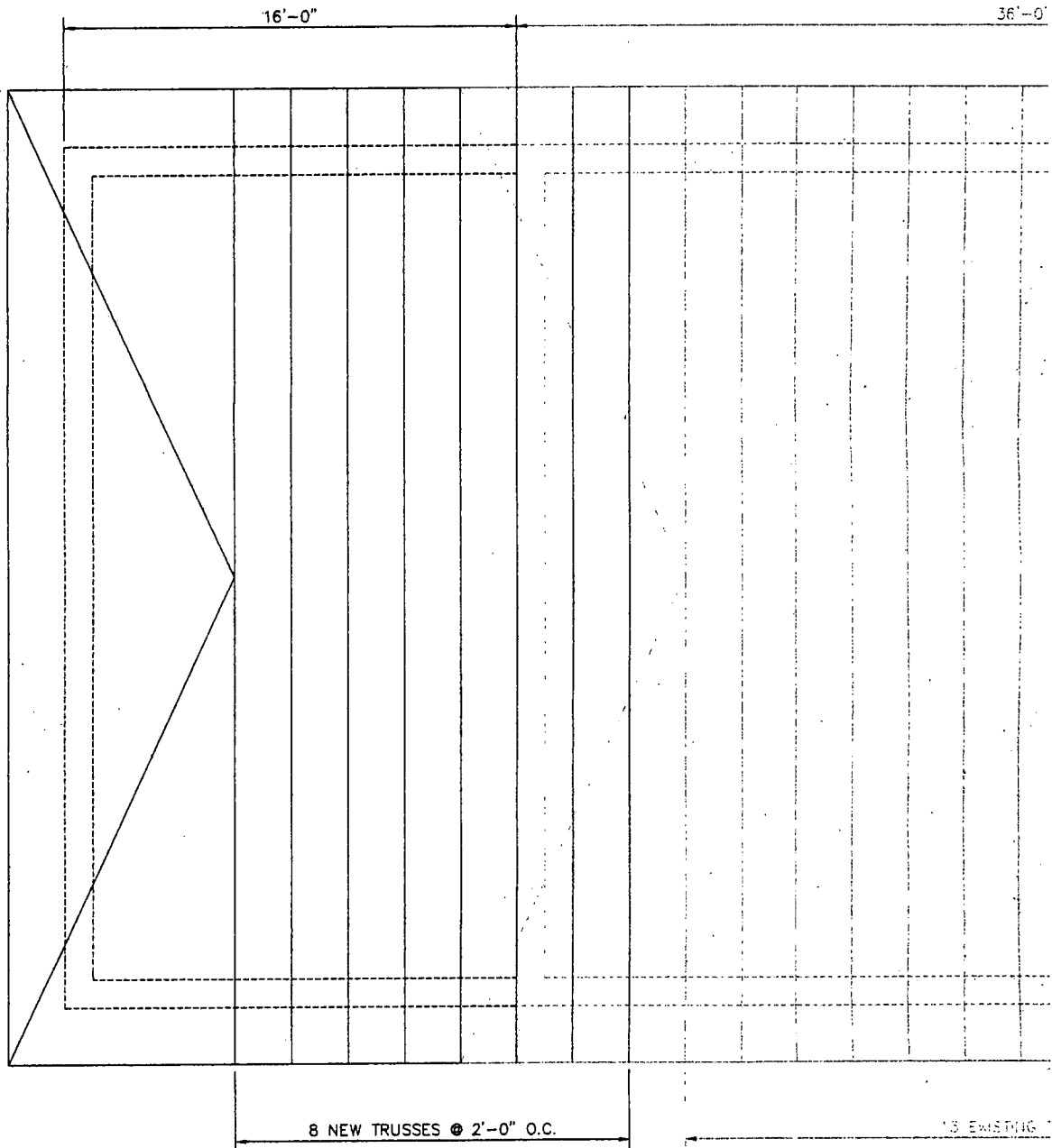
SYMBOL	
	A
	D
	S
	Φ
	⊠
	⊙
	—
	- - -
	┆



ROOF FRAMING PLAN



NORTH ELEVATION



ROOF FRAMING PLAN

LENGTH OF SOILS

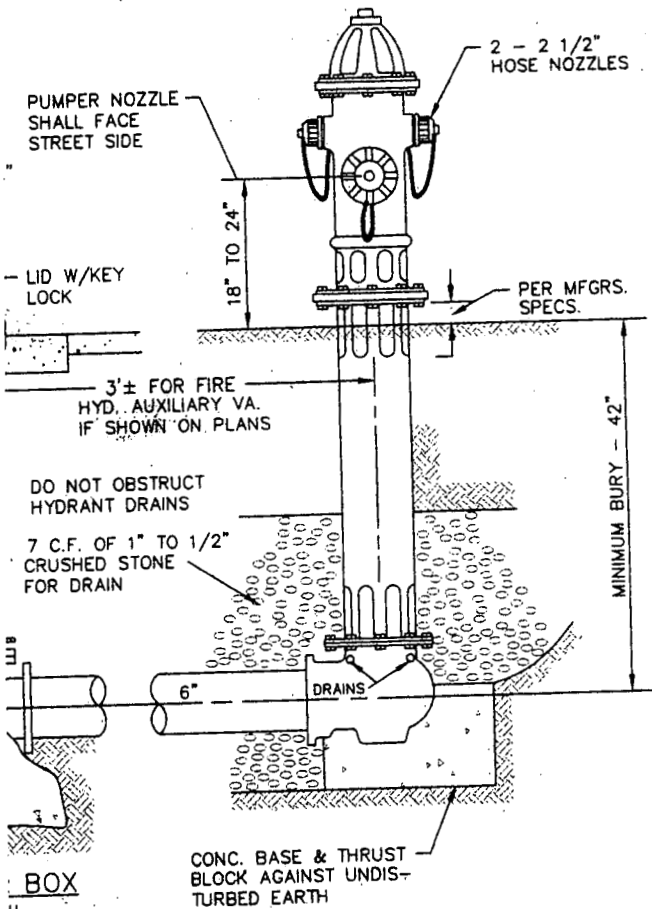
ring Loads	Lbs. Sq. Ft.
	10,000
1 Sand	4,000
compact Sand	3,000
be spaded	2,000
	1,000
	0

THRUST PER POUND OF WATER PRESSURE

Pipe Size	Dead End or Tee	90° Elbow	45° Elbow	22 1/2° Elbow
4	20	40	27	20
6	39	60	34	19
8	68	100	56	31
10	110	160	89	48
12	155	220	120	62
14	210	300	168	87
16	270	400	225	121
18	380	500	280	145
20	480	670	370	190
24	690	970	530	270

DOCKING DETAILS

NOT TO SCALE



VALVE INSTALLATION

NOT TO SCALE

HUN



**DETAIL
NG**



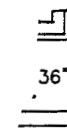
A.J. 45' ANCHOR RETAIN

Drawn by:
RHM
Checked by:
HHM
File:
HSI97A07
Date:
12/2/97
Revised:
4/22/98

**WATER SYSTEM STANDARDS
HICKORY WATER DISTRICT**



IF



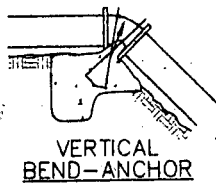
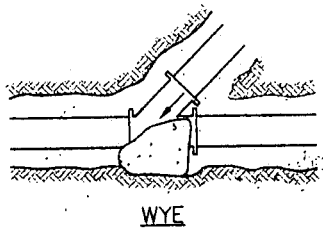
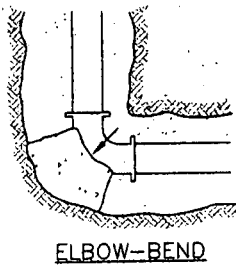
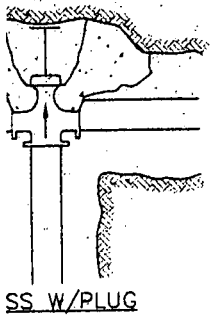
36"

Sheet

8

of 8 sheets

G



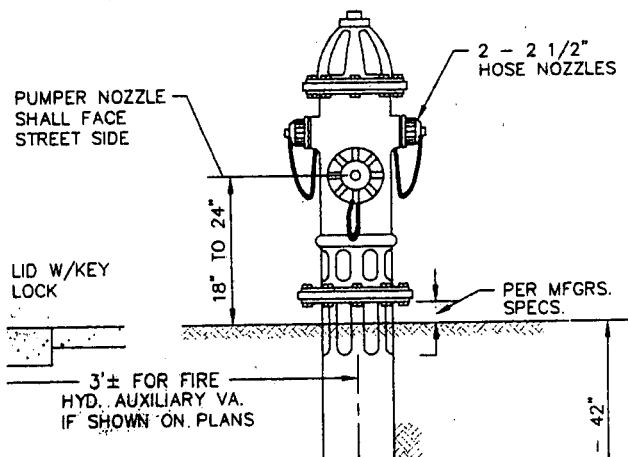
LENGTH OF SOILS

Soil Loads	Lbs. Sq. Ft.
Sand	10,000
	4,000
compact Sand	3,000
compacted	2,000
	1,000
	0

THRUST PER POUND OF WATER PRESSURE

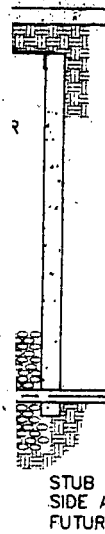
Pipe Size	Dead End or Tee	90° Elbow	45° Elbow	22 1/2° Elbow
4	20	40	27	20
6	39	60	34	19
8	68	100	56	31
10	110	160	89	48
12	155	220	120	82
14	210	300	168	87
16	270	400	225	121
18	380	500	280	145
20	480	670	370	190
24	690	970	530	270

DOCKING DETAILS
TO SCALE



HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PADUCAH KENTUCKY 42008
(502) 554-2737 • FAX (502) 554-2738



3' ON
RTY
EER

**DETAIL
ING**



A.J. 45'
ANCHOR
RETAIN

Drawn by:
RHM
Checked by:
HHM
File:
HSI97A07
Date:
12/2/97
Revised:
4/22/98

CARDS
RICT

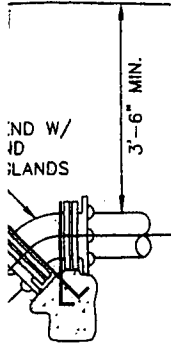
NOTES:

1. ARROWS SHOW DIRECTION OF THRUST.
2. BLOCKING SHALL BEAR AGAINST UNDISTURBED EARTH.
3. BRACE PLUGS AGAINST UNDISTURBED EARTH.
4. THRUST BLOCKS SHALL BE 2500 P.S.I. (5 BAG MIX) CONCRETE.
5. CONCRETE SHALL NOT OBSTRUCT FITTING CONNECTIONS.

BEARING STRENGTH OF SOILS

Soils and Safe Bearing Loads	Lbs. Sq. Ft.
Sound Shale	10,000
Cemented Gravel and Sand difficult to pick	4,000
Coarse and fine compact Sand	3,000
Medium Clay - Can be spaded	2,000
Soft Clay	1,000
Muck	0

THRUST BLOCKING DETAILS
NOT TO SCALE

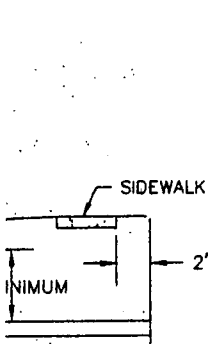


CONCRETE ENCASEMENT REQ'D. WHERE DIRECTED BY ENGINEER

45° BEND. H THRUST BLOCK

IMPROVED SECTION

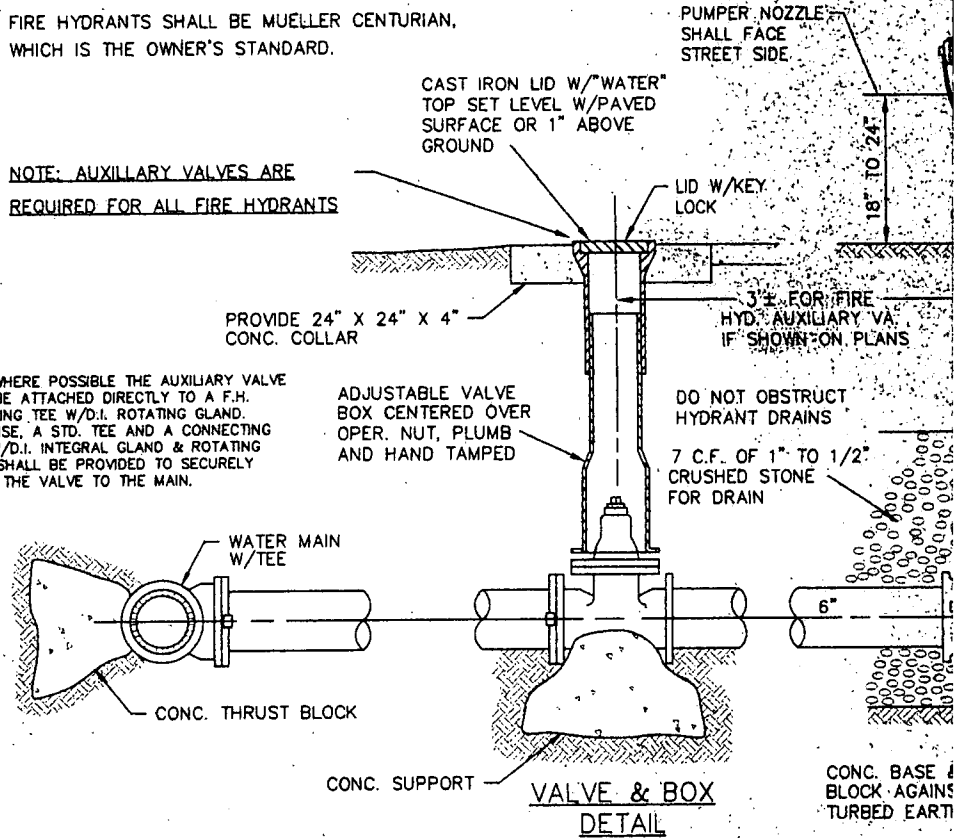
1. LIMIT OF OPEN CUT IS 5' FROM PVMT. OR CURB AND 2' FROM SIDEWALK.



FIRE HYDRANTS SHALL BE MUELLER CENTURIAN, WHICH IS THE OWNER'S STANDARD.

NOTE: AUXILIARY VALVES ARE REQUIRED FOR ALL FIRE HYDRANTS

NOTE: WHERE POSSIBLE THE AUXILIARY VALVE SHALL BE ATTACHED DIRECTLY TO A F.H. ANCHORING TEE W/D.I. ROTATING GLAND. OTHERWISE, A STD. TEE AND A CONNECTING PIECE W/D.I. INTEGRAL GLAND & ROTATING GLAND SHALL BE PROVIDED TO SECURELY FASTEN THE VALVE TO THE MAIN.

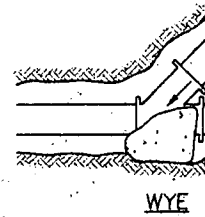
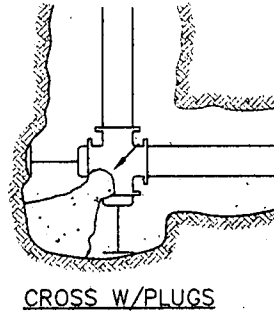
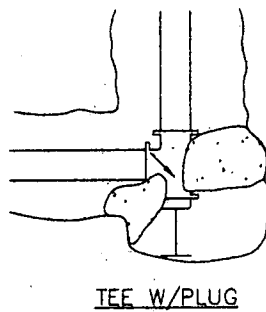
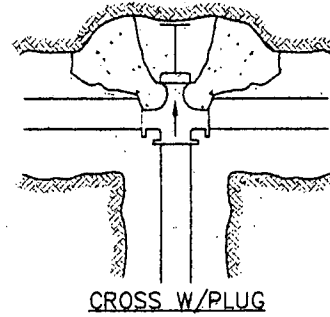
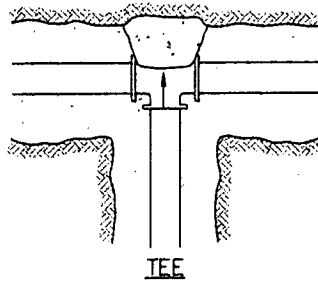


FIRE HYDRANT AND VALVE INSTALLA
NOT TO SCALE

ET TOP OF METER
OX LEVEL WITH
AVED SURFACE
R 1" ABOVE GROUND
URFACE.

METERS SHALL BE NEPTUNE,
ROCKWELL, OR BADGER.

T 5' ON CUST.
CAP END FOR
NE-IN

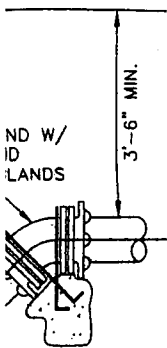


- NOTES:
1. ARROWS SHOW DIRECTION OF THRUST.
 2. BLOCKING SHALL BEAR AGAINST UNDISTURBED EARTH.
 3. BRACE PLUGS AGAINST UNDISTURBED EARTH.
 4. THRUST BLOCKS SHALL BE 2500 P.S.I. (5 BAG MIX) CONCRETE.
 5. CONCRETE SHALL NOT OBSTRUCT FITTING CONNECTIONS.

BEARING STRENGTH OF SOILS

Soils and Safe Bearing Loads	Lbs. Sq. Ft.
Sound Shale	10,000
Cemented Gravel and Sand difficult to pick	4,000
Coarse and fine compact Sand	3,000
Medium Clay - Can be spaded	2,000
Soft Clay	1,000
Muck	0

THRUST BLOCKING DETAILS
NOT TO SCALE



CONCRETE ENCASEMENT
REQ'D. WHERE
DIRECTED BY
ENGINEER

45° BEND,
H THRUST BLOCK

FIRE HYDRANTS SHALL BE MUELLER CENTURIAN,
WHICH IS THE OWNER'S STANDARD.

NOTE: AUXILIARY VALVES ARE
REQUIRED FOR ALL FIRE HYDRANTS

PROVIDE 24" X 24" X 4"
CONC. COLLAR

CAST IRON LID W/"WATER"
TOP SET LEVEL W/PAVED
SURFACE OR 1" ABOVE
GROUND

PUMPER NOZZLE
SHALL FACE
STREET SIDE

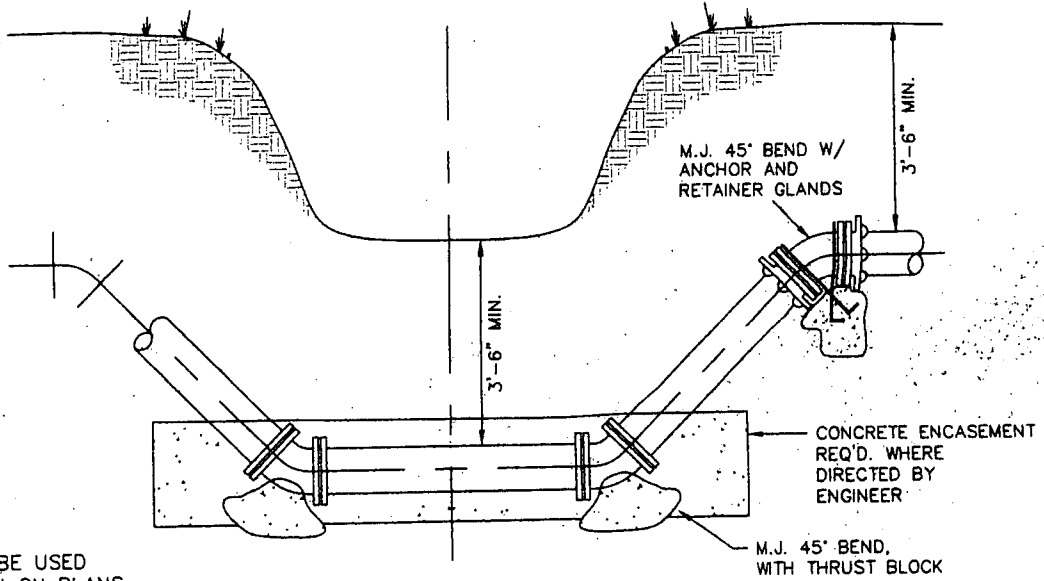
LID W/KEY
LOCK

3" FOR FIRE
HYD. AUXILIARY VA.
IF SHOWN ON PLANS

NOTE: WHERE POSSIBLE THE AUXILIARY VALVE

SERVICE CONNECTION DETAILS AND METER SETTING

NOT TO SCALE



NOTE:
THIS CROSSING TO BE USED ONLY WHERE SHOWN ON PLANS OR AS DIRECTED BY ENGR. PAYMENT SHALL BE AT UNIT PRICES BID FOR ITEMS USED.

CREEK CROSSING WITH DUCTILE IRON PIPE AND BENDS

NOT TO SCALE

RURAL SECTION

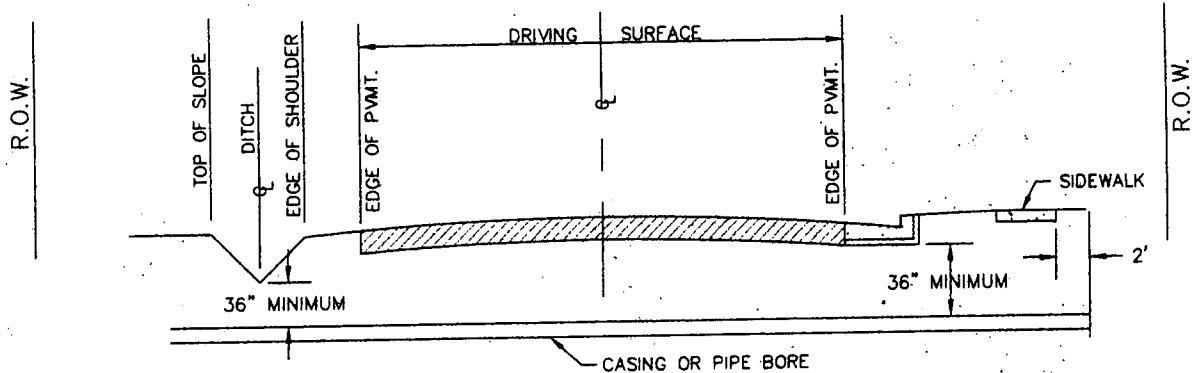
1. LIMIT OF OPEN CUT IS 5' FROM PVMT.

GENERAL

1. ALL WORK WITHIN ROW SHALL BE IN ACCORDANCE WITH THE PERMIT.
2. CASING IS REQ'D. ON ALL MAINS OVER 2".
3. BORE PITS SHALL BE BACKFILLED & COMPACTED.
4. SEED & STRAW ALL AREAS DISTURBED BY WORK.
5. ALL DRAINAGE DITCHES SHALL BE LEFT OPEN.
6. CARRIER PIPE SHALL BE INSTALLED WITH SKIDS PER THE SPECIFICATIONS.
7. SEAL THE ENDS OF CASING PER THE SPECS.
8. NO JOINTS UNDER PAVEMENT WITHOUT CASING.

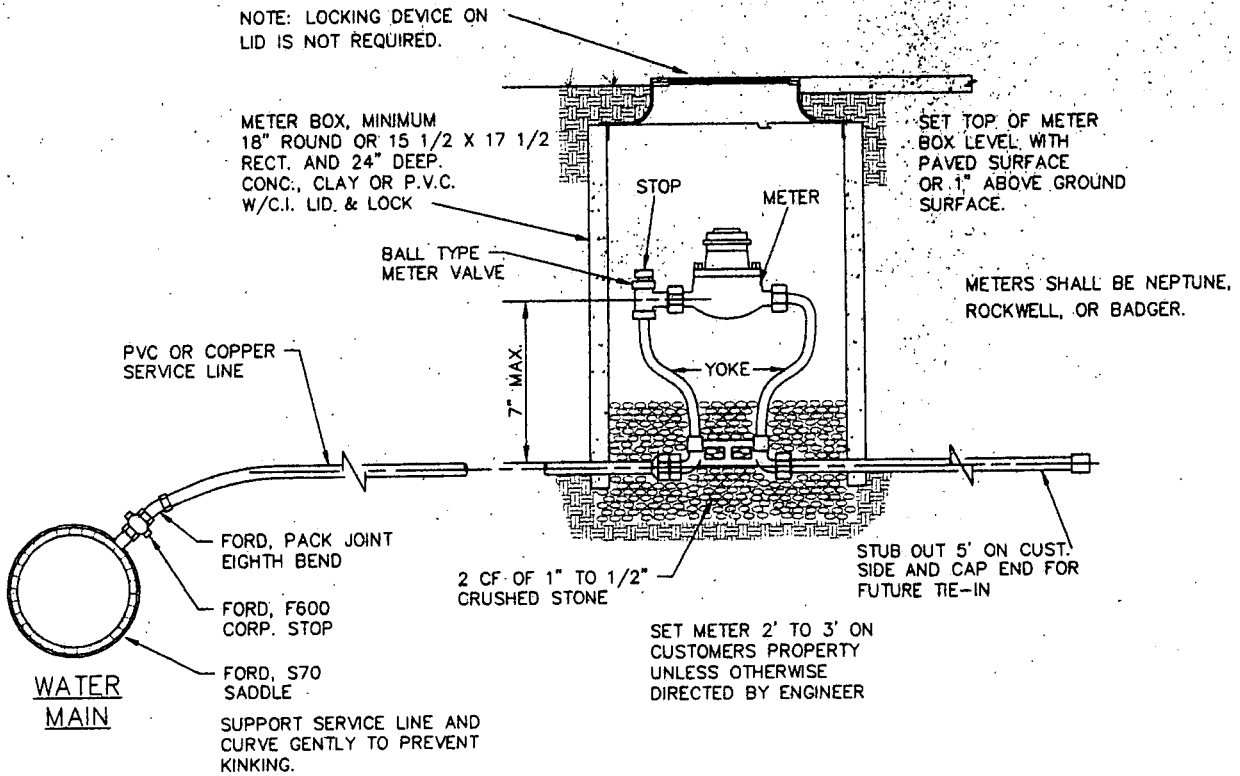
IMPROVED SECTION

1. LIMIT OF OPEN CUT IS 5' FROM PVMT. OR CURB AND 2' FROM SIDEWALK.



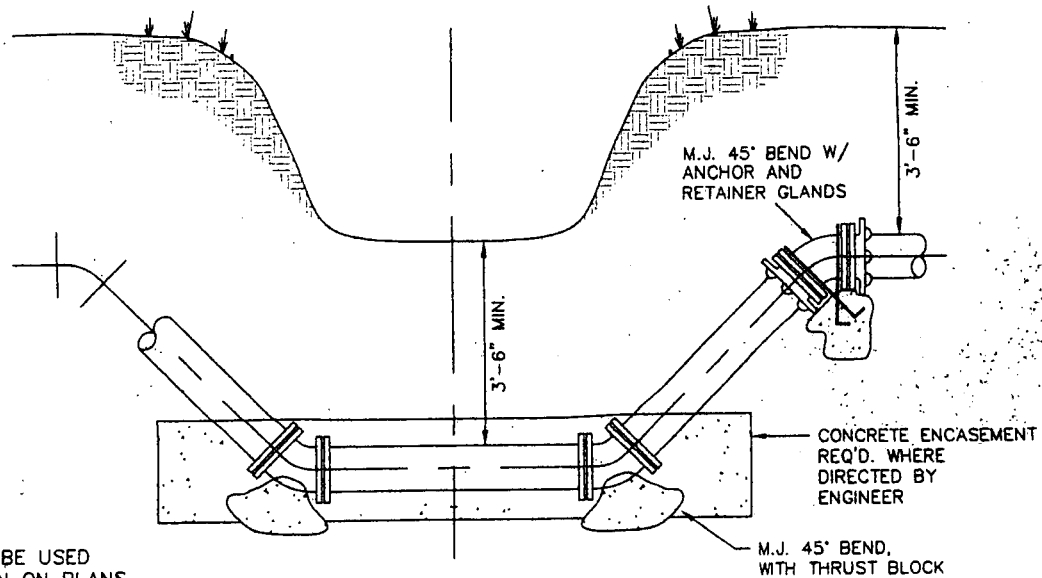
HIGHWAY OR ROAD CROSSING

NOT TO SCALE



**SERVICE CONNECTION DETAILS
AND METER SETTING**

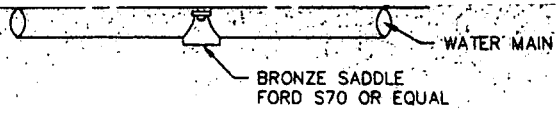
NOT TO SCALE



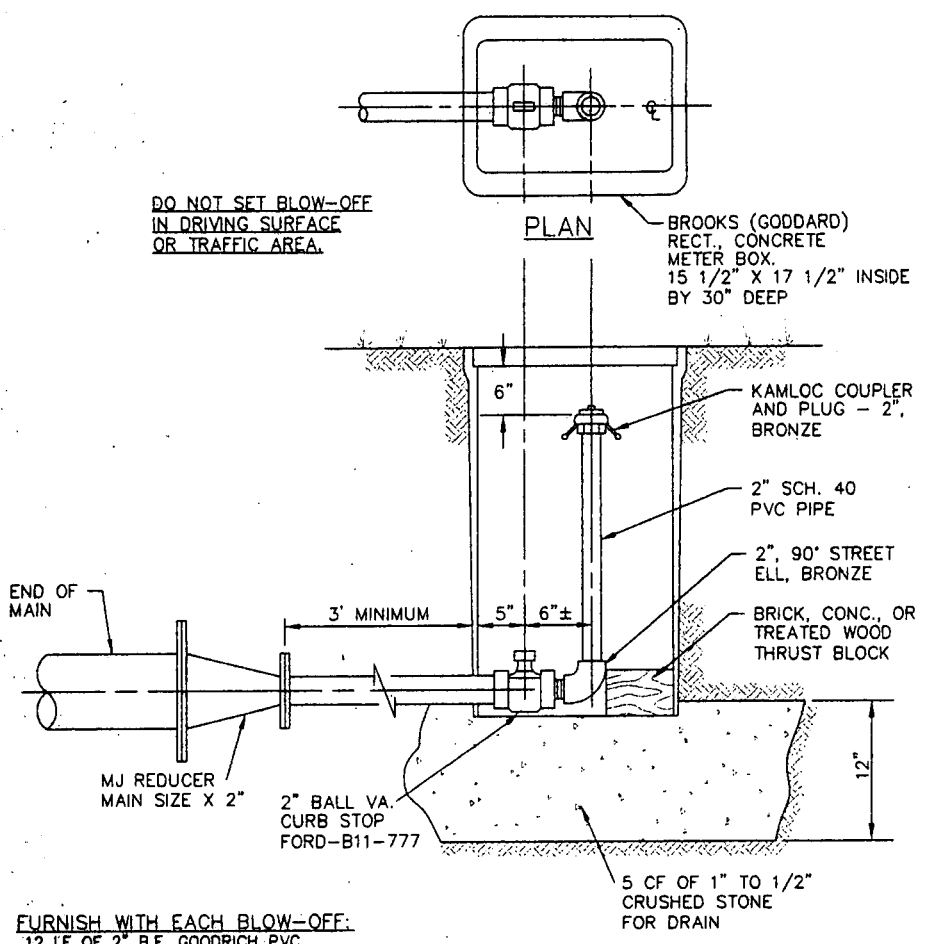
NOTE:
THIS CROSSING TO BE USED
ONLY WHERE SHOWN ON PLANS
OR AS DIRECTED BY ENGR.
PAYMENT SHALL BE AT UNIT
PRICES BID FOR ITEMS USED.

**CREEK CROSSING WITH DUCTILE
IRON PIPE AND BENDS**

NOT TO SCALE



AIR RELEASE VALVE INSTALLATION
 (VALVE SIZE PER PLANS)
 NOT TO SCALE



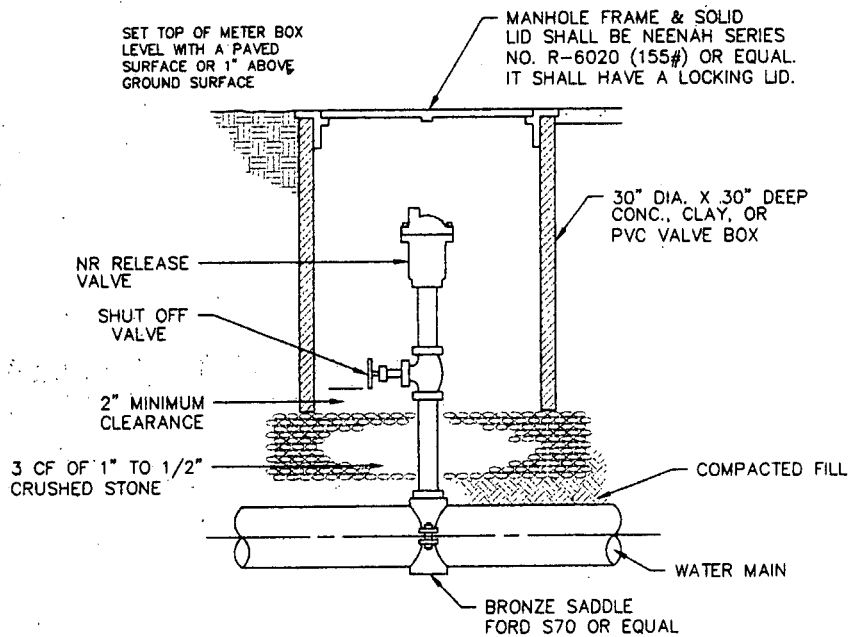
NOTE:
 THIS CROSSING TO ONLY WHERE SHO OR AS DIRECTED. PAYMENT SHALL BE PRICES BID FOR I

RURAL SE
 1. LIMIT OF FROM PV

FURNISH WITH EACH BLOW-OFF:
 12 LF OF 2" B.F. GOODRICH PVC WATER DISCHARGE HOSE (ROLLS FLAT) W/A 2" BRONZE KAMLOC HOSE SHANK ADAPTER IN ONE END, OR EQUAL.

BLOW - OFF VALVE
 NOT TO SCALE

R.O.W.

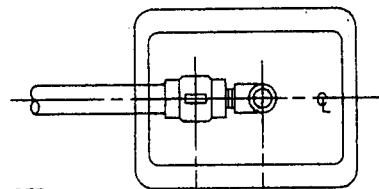


AIR RELEASE VALVE INSTALLATION

(VALVE SIZE PER PLANS)

NOT TO SCALE

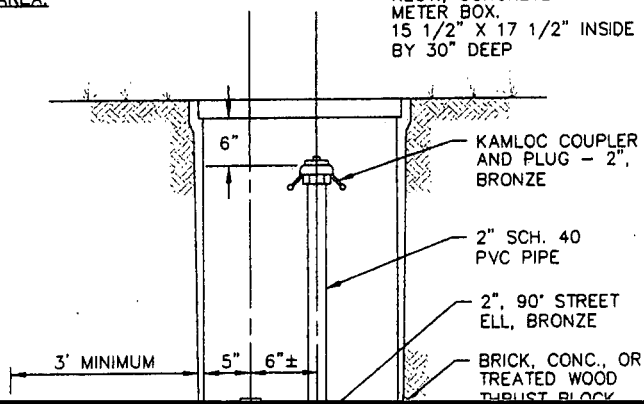
DO NOT SET BLOW-OFF
IN DRIVING SURFACE
OR TRAFFIC AREA.



PLAN

BROOKS (GODDARD)
RECT. CONCRETE
METER BOX.
15 1/2" X 17 1/2" INSIDE
BY 30" DEEP

END OF
MAIN



NOTE:

THIS CROSSING TO
ONLY WHERE SHO
OR AS DIRECTED
PAYMENT SHALL
PRICES BID FOR I

MENTS (D TANK)

INDEX	
SHEET	TITLE
1	COVER
2	OVERALL DISTRIBUTION SYSTEM
3	INDUSTRIAL PARK NO. 3 ELEVATED TANK

RECEIVED
MAY 1 1968
CIVIL ENGINEERING
DIVISION

99-04
EXHIBIT J2

SET NO. 10

STRICT ENTUCKY

K
MENTS
) TANK)

INDEX	
SHEET	TITLE
1	COVER

TEMP IMPROVEMENT LON ELEVATED TA NTRACT "B"

COMMISSIONERS

ROBERT H. SULLIVAN, CHAIRMAN
TOMMY C. GREEN, SECRETARY
SAM E. DAVIS, TREASURER

SHEET	
1	C
2	O
3	IN EI

APRIL, 1998
(BID OCTOBER, 1998)

ER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
3220 LONE OAK ROAD * PADUCAH KENTUCKY 42003
(502) 554-2737 * FAX (502) 554-2738

VATER DISTE

ES COUNTY, KENTU

DUSTRIAL PARK

TEM IMPROVEMEN'

LON ELEVATED TA

NTRACT "B"

COMMISSIONERS

ROBERT H. SULLIVAN, CHAIRMAN

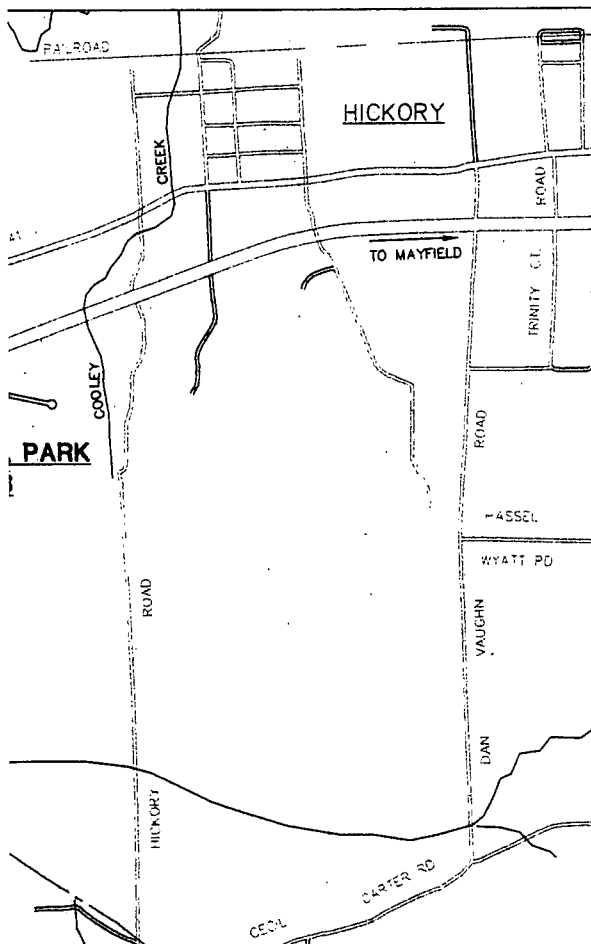
TOMMY C. GREEN, SECRETARY

SAM E. DAVIS, TREASURER

SHEET	
1	2

WATER SYSTEM (500,000 GALLON

CONTR.



COMMIS

ROBERT H. SULL
TOMMY C. GREI
SAM E. DAVIS

APRIL
(BID OCTO

ON MAP

No. AKY 0382



HUNTER MARTIN

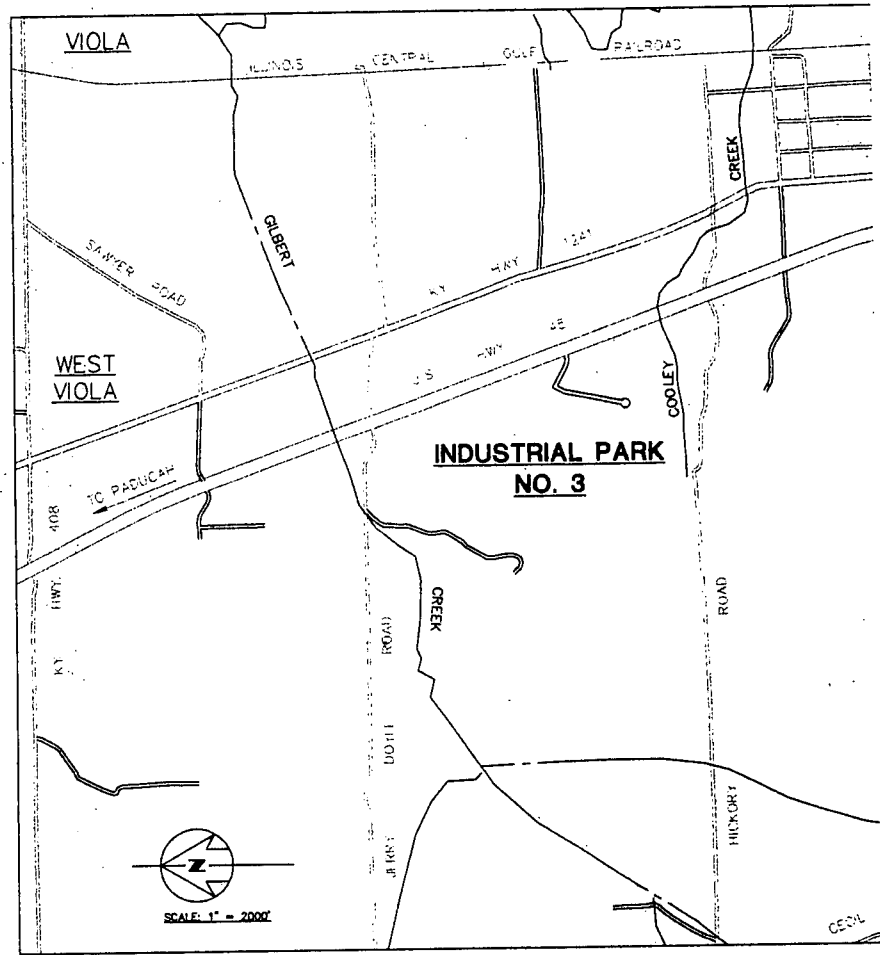
ENGINEER
3220 LONE OAK RD.
(502) 554-27

W
(50

I
A
J,
T)

1
3E

V
RS
0
7



LOCATION MAP

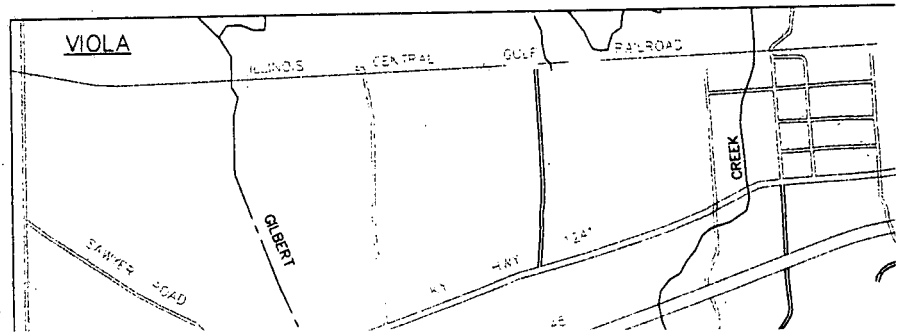
EDA Project No. AKY 0382

HICK

HICKC

W

(500



I
A
J,
m

HICKORY WATER

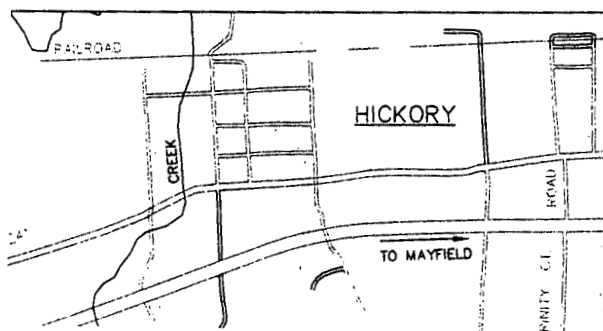
HICKORY, GRAVES COUNTY

1998 INDUSTRIAL

WATER SYSTEM

(500,000 GALLON

CONTRACT



COMMISSIONERS

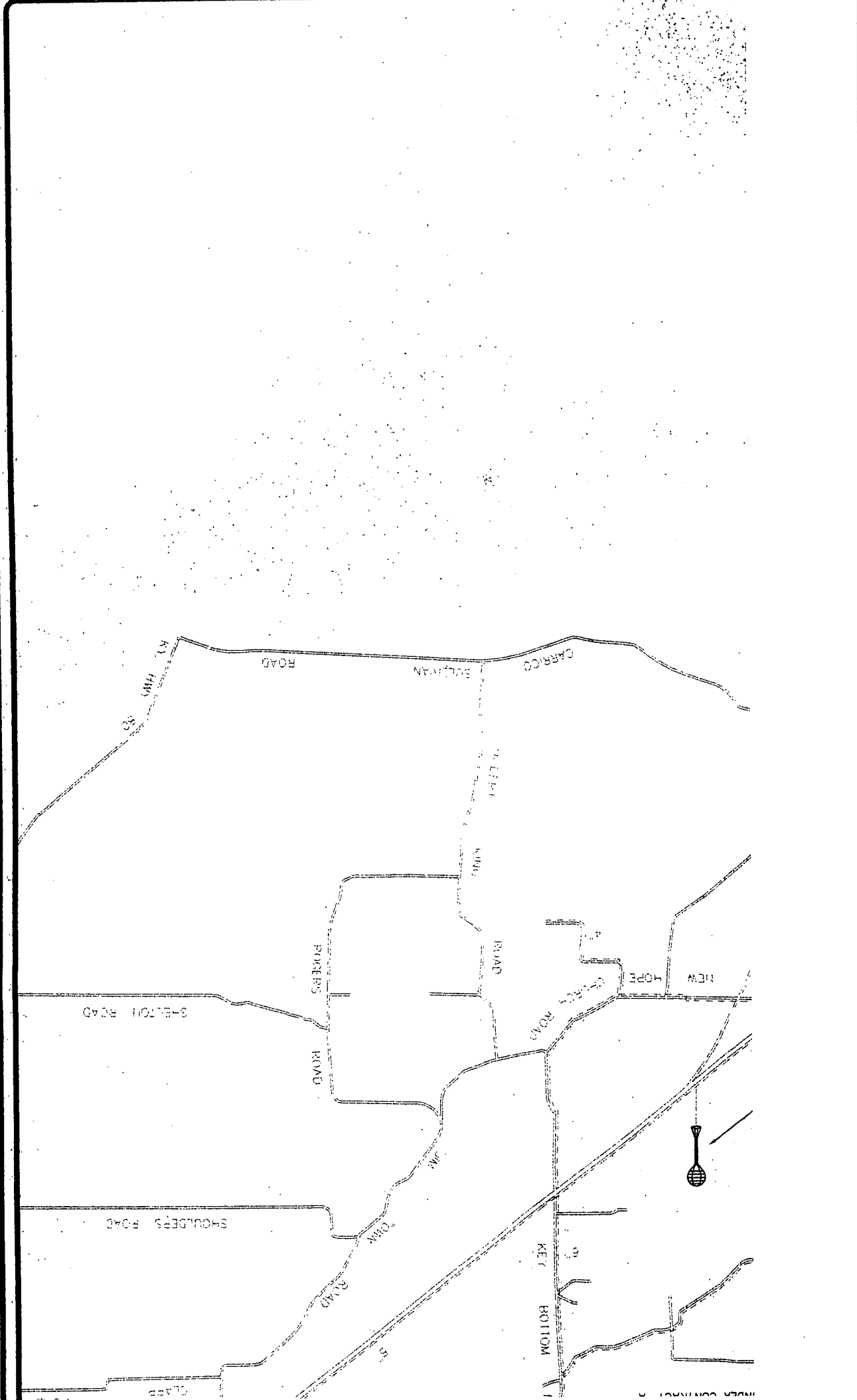
ROBERT H. SULLIVAN

TOMMY C. GREEN

GARY E. DAVIS

HICKORY WATER DISTRICT
OVERALL
DISTRIBUTION
SYSTEM

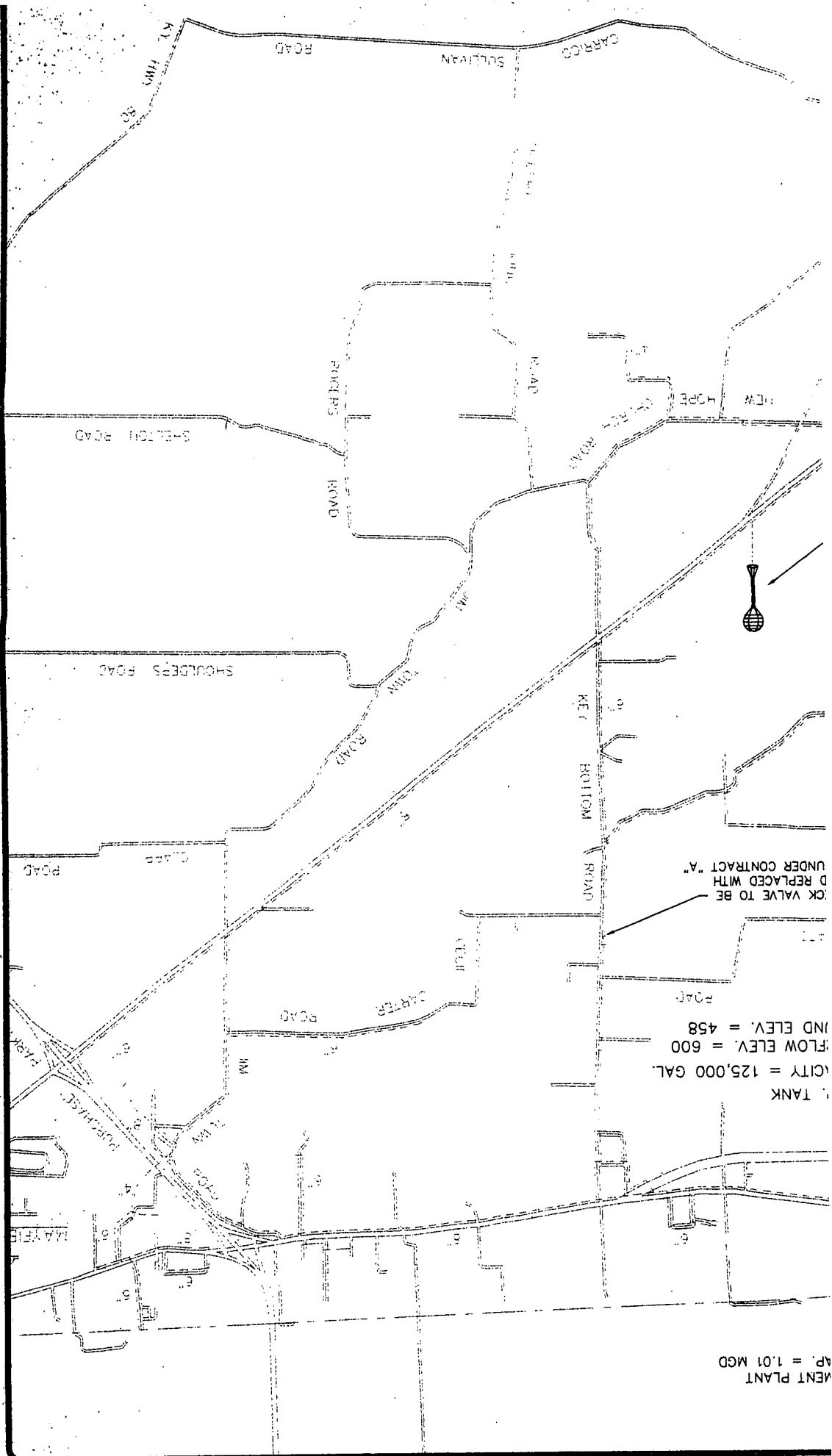
Drawn by: SDC
Checked by: JJ
Date: 4-20-98
File: HS197803
Revised: N/A



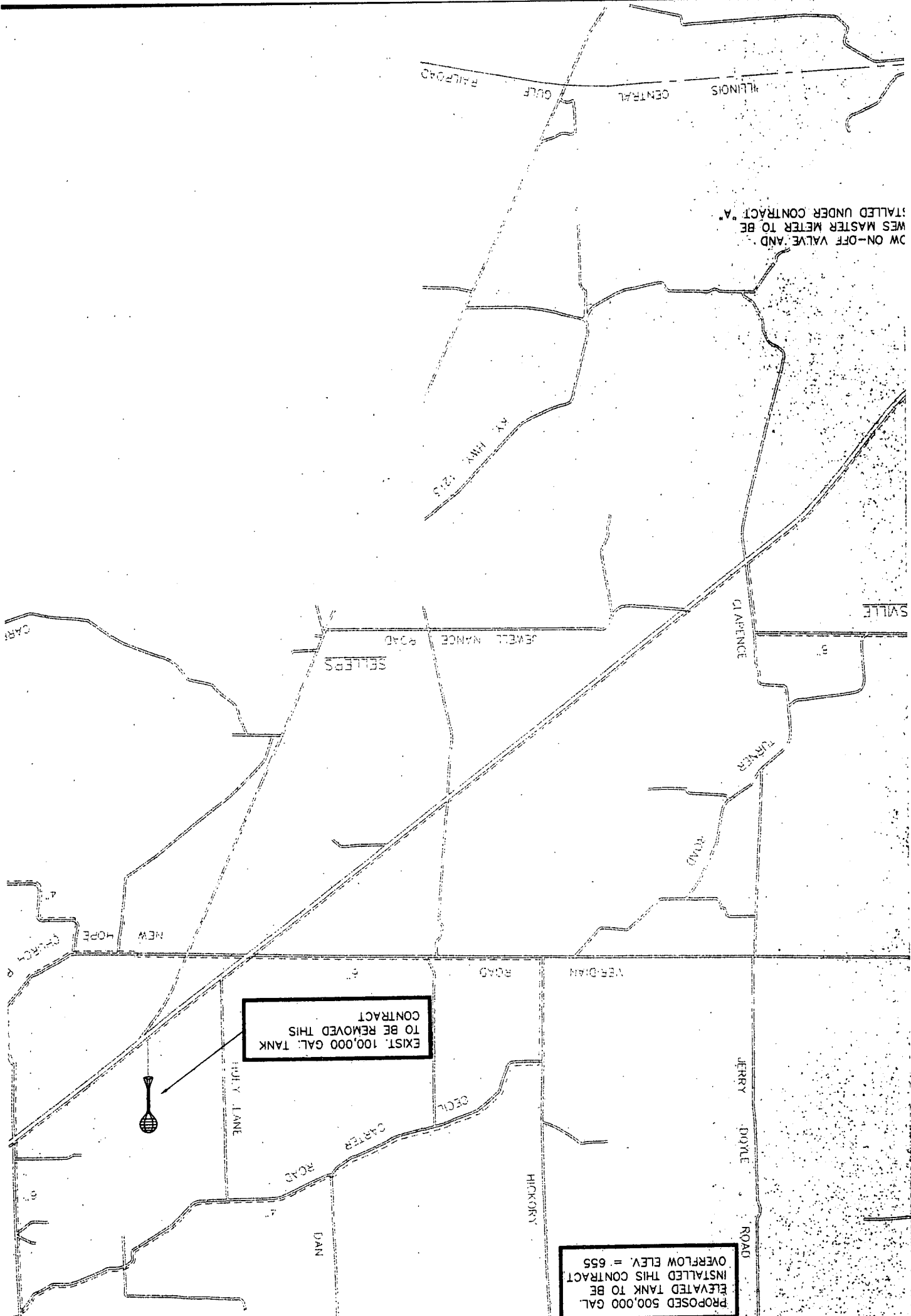
Drawn by	SDC
Checked by	JJ
File:	HS197803
Date:	4-20-98
Revised:	N/A



HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
 3230 LONE OAK ROAD
 PADUCAH, KENTUCKY 42003
 (502) 564-2737 FAX (502) 554-2738



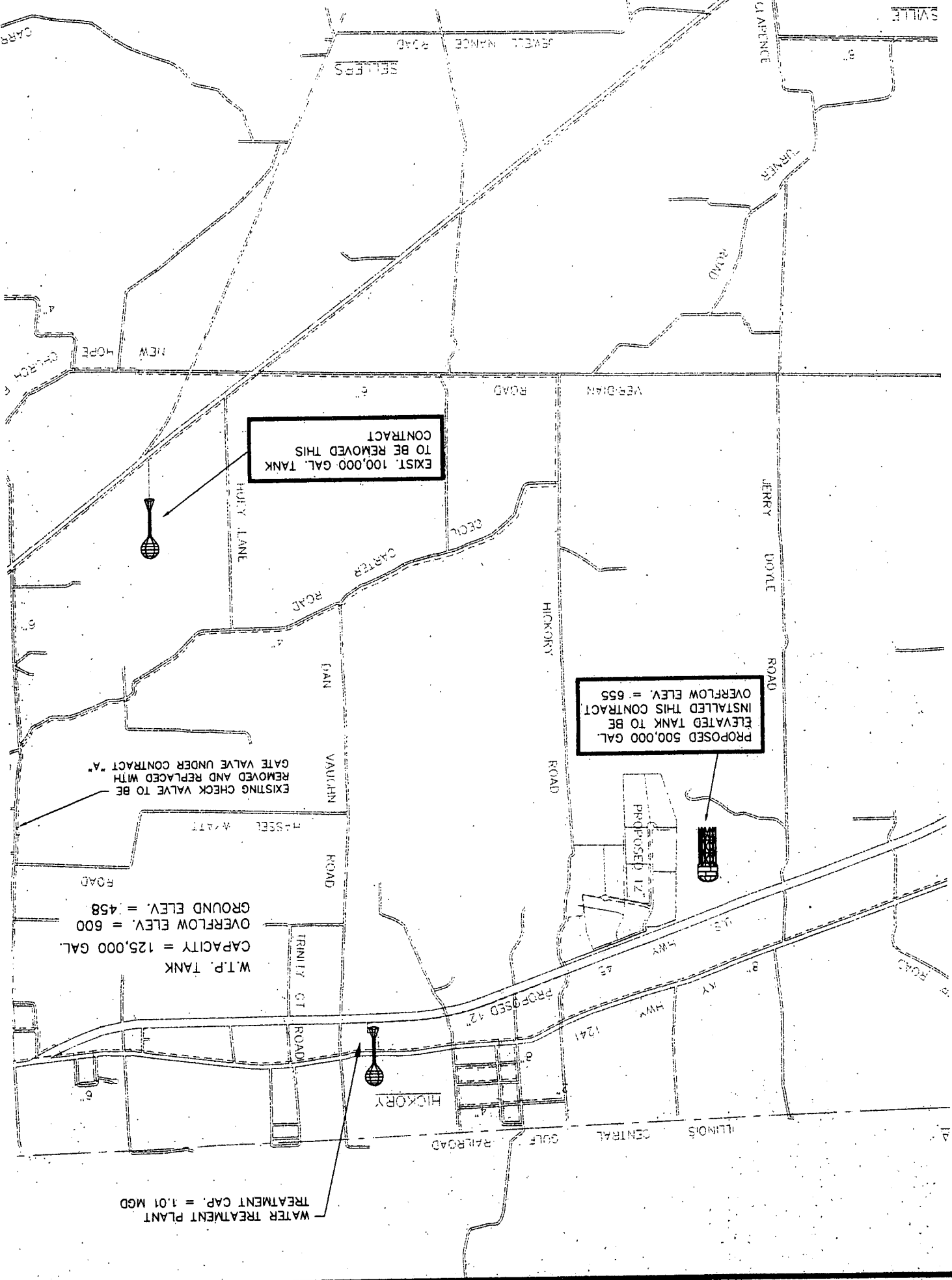
MENT PLANT
 AP. = 1.01 MGD



ON-OFF VALVE AND WES MASTER METER TO BE STALLED UNDER CONTRACT "A"

EXIST. 100,000 GAL. TANK TO BE REMOVED THIS CONTRACT

PROPOSED 500,000 GAL. ELEVATED TANK TO BE INSTALLED THIS CONTRACT OVERFLOW ELEV. = 655



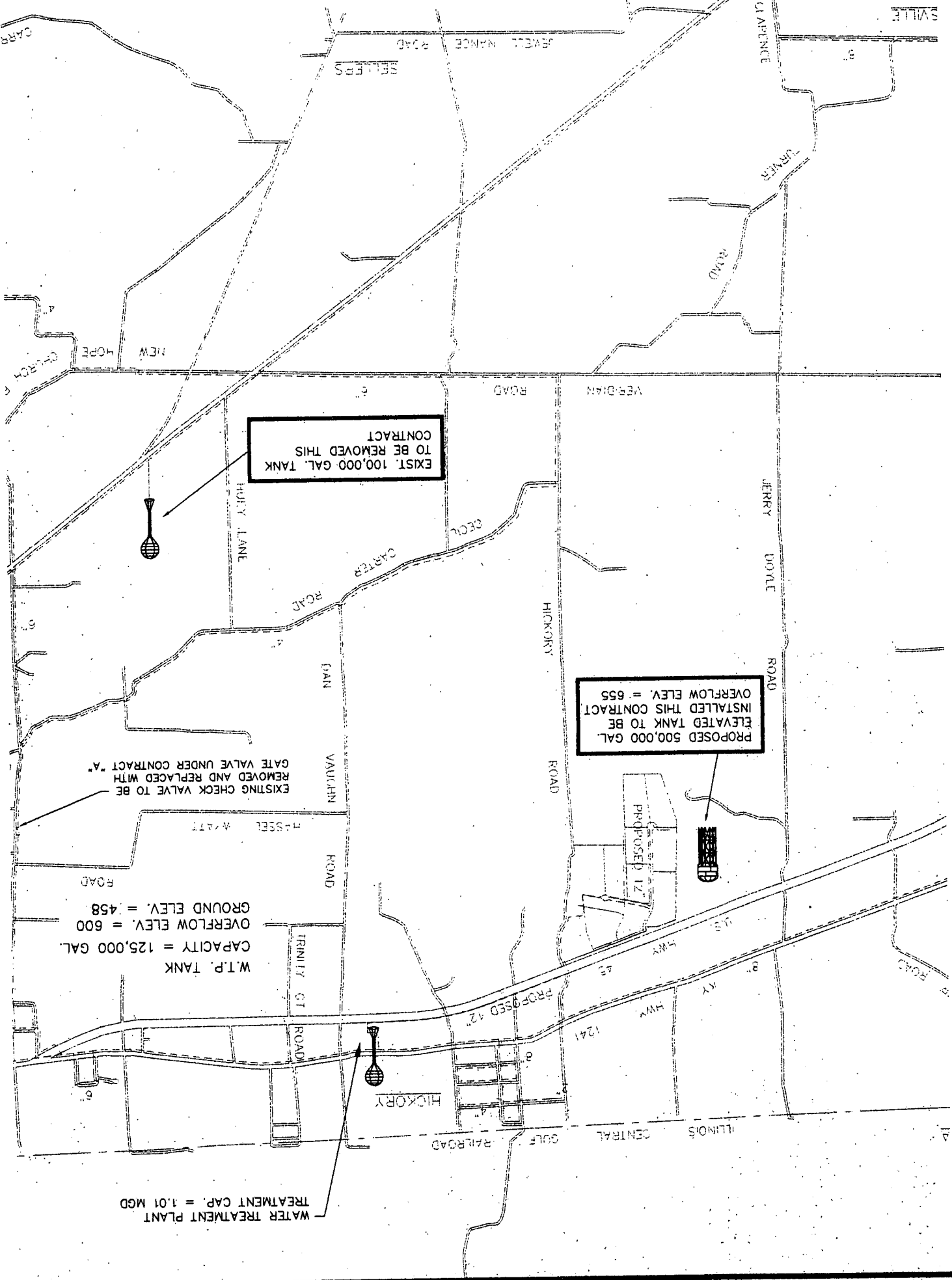
WATER TREATMENT PLANT
CAP. = 1.01 MGD

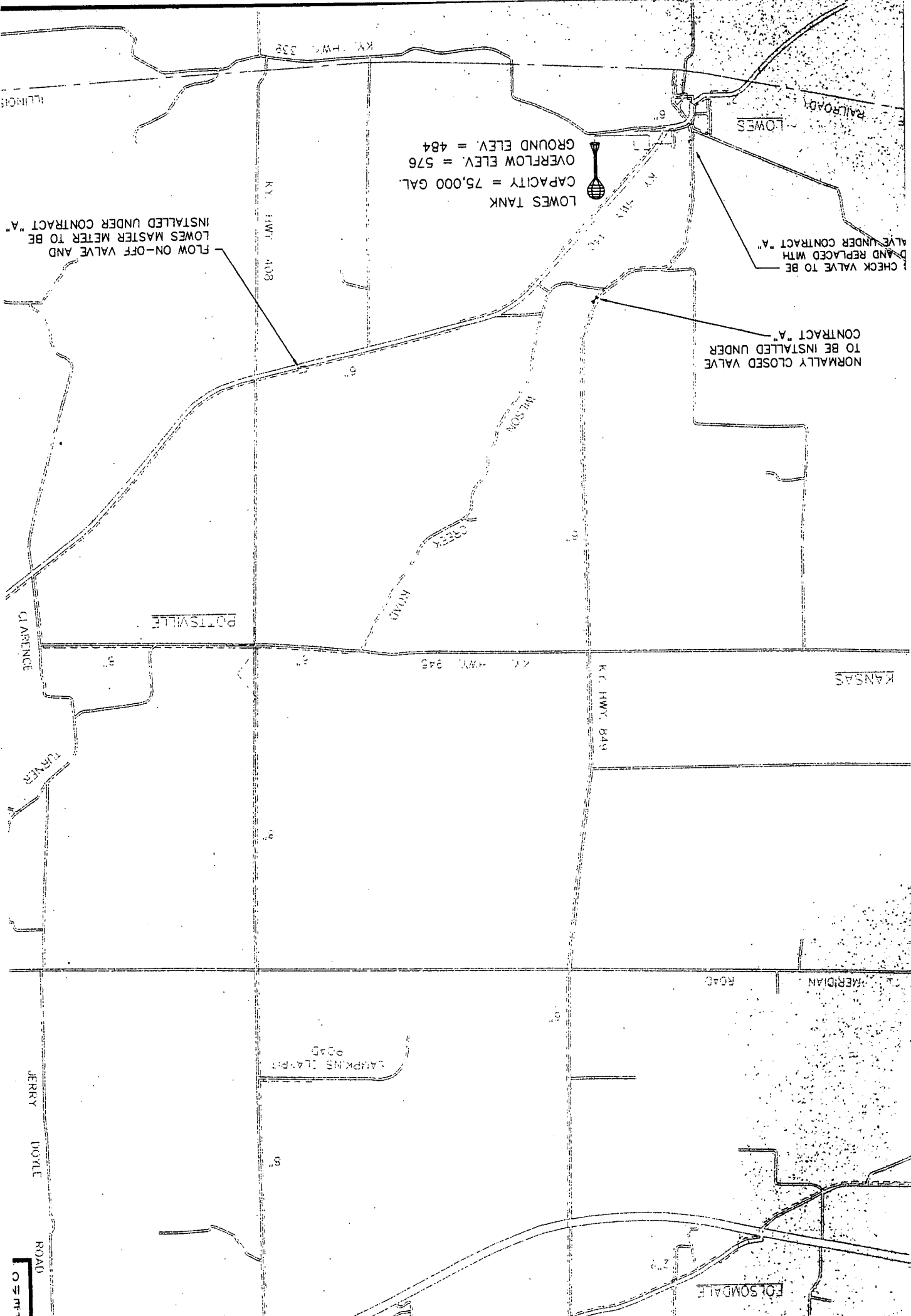
W.T.P. TANK
CAPACITY = 125,000 GAL.
OVERFLOW ELEV. = 600
GROUND ELEV. = 458

EXISTING CHECK VALVE TO BE
REMOVED AND REPLACED WITH "A"
GATE VALVE UNDER CONTRACT "A"

EXIST. 100,000 GAL. TANK
TO BE REMOVED THIS
CONTRACT

PROPOSED 500,000 GAL.
ELEVATED TANK TO BE
INSTALLED THIS CONTRACT
OVERFLOW ELEV. = 655





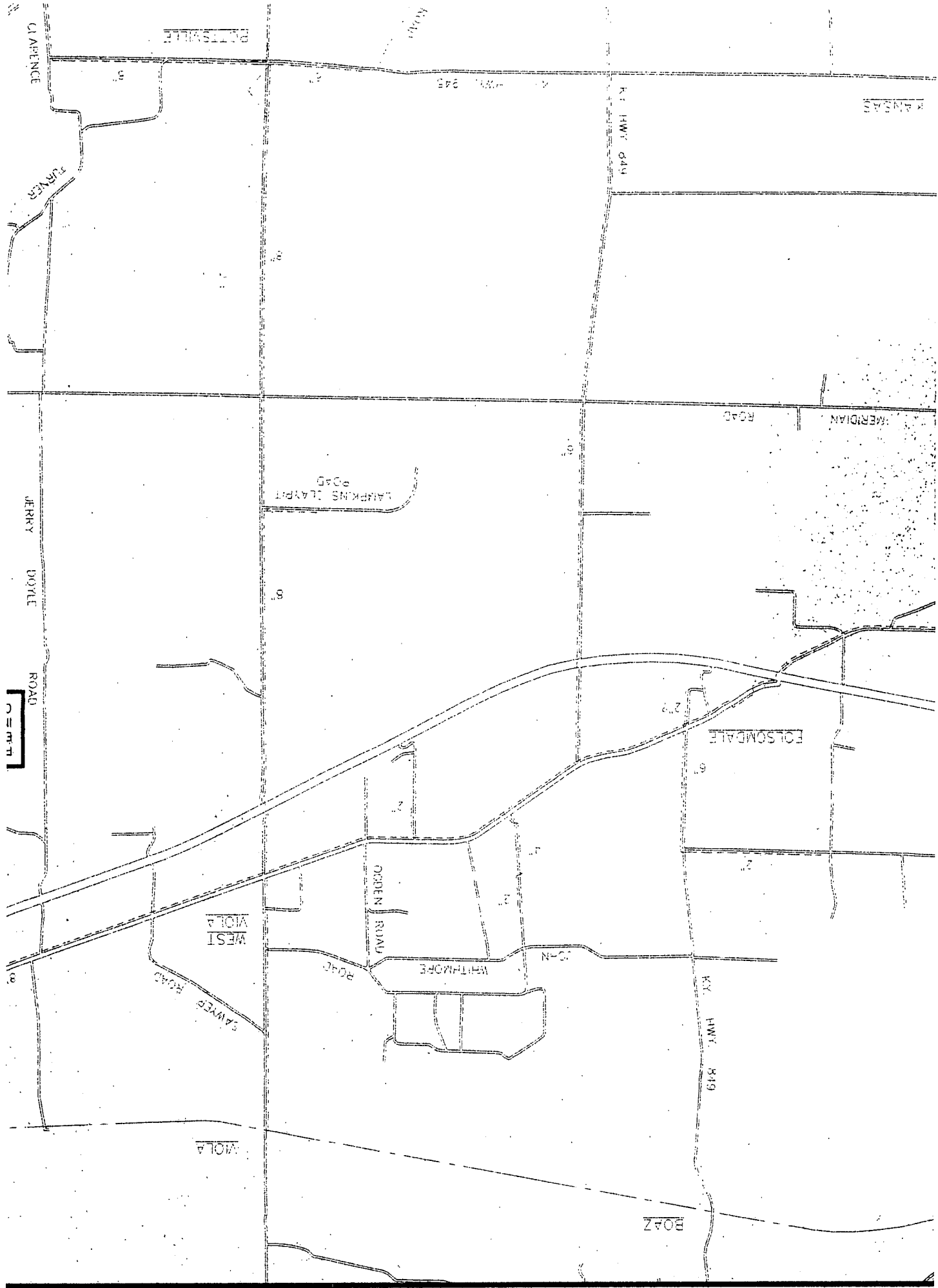
LOWES TANK
CAPACITY = 75,000 GAL.
OVERFLOW ELEV. = 576
GROUND ELEV. = 484

LOWES MASTER METER TO BE
INSTALLED UNDER CONTRACT "A".
FLOW ON-OFF VALVE AND
LOWES MASTER METER TO BE
INSTALLED UNDER CONTRACT "A".

CHECK VALVE TO BE
REPLACED WITH
VALVE UNDER CONTRACT "A".

NORMALLY CLOSED VALVE
TO BE INSTALLED UNDER
CONTRACT "A".

0 5 10
FEET



BUTTSVILLE

KANSAS

CLARENCE

TURNER

JERRY DOYLE ROAD

100 FT

WEST VIOLA

SAYRE ROAD

ODDEN ROAD

WHITMORE ROAD

KOL. HWT. 849

EOLSOMDALE

MERCIDIAN ROAD

BOAZ

JACKSONS LAMP

1848

K. HWT. 844

91

91

27

91

27

JOHN

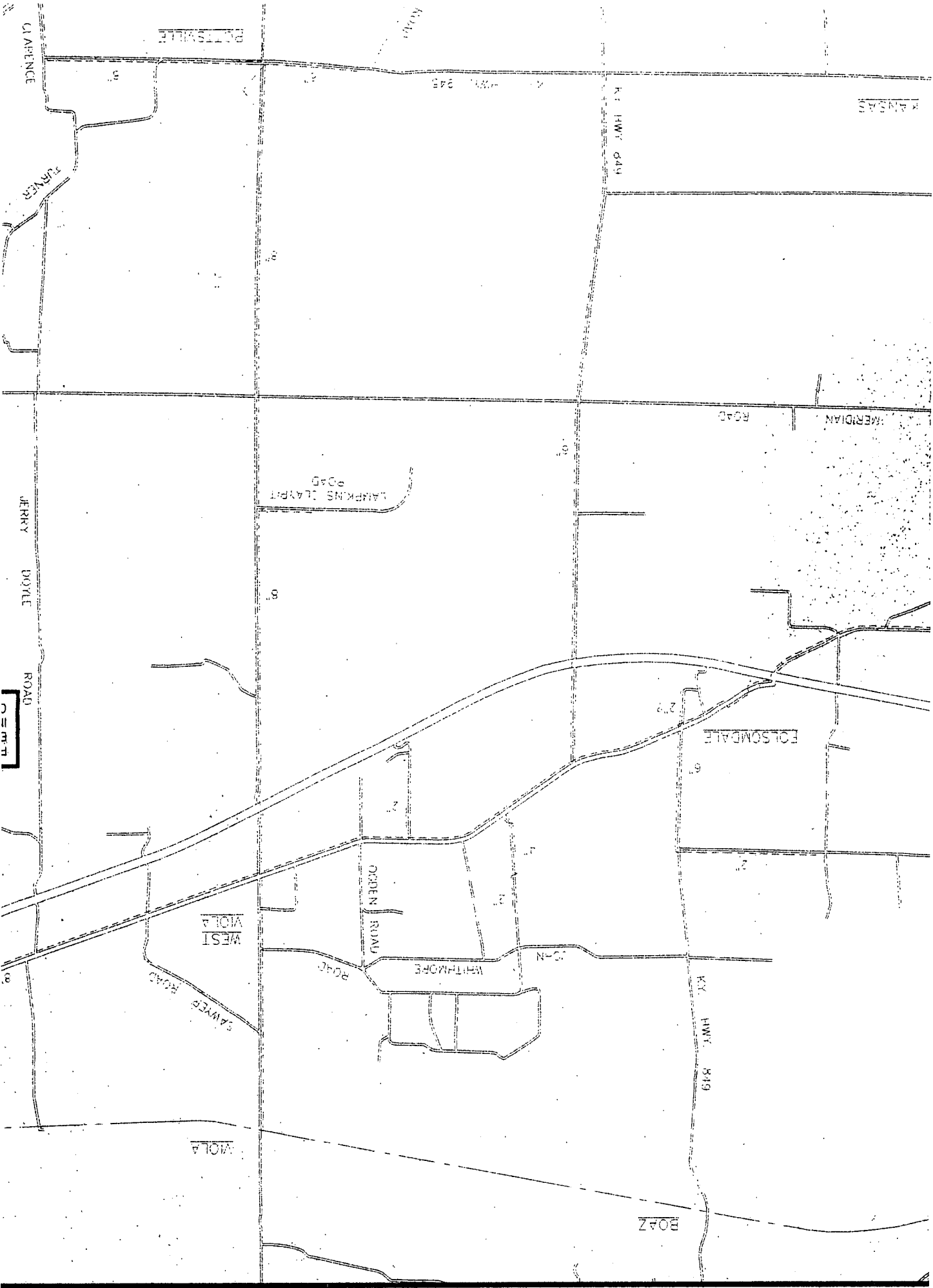
31

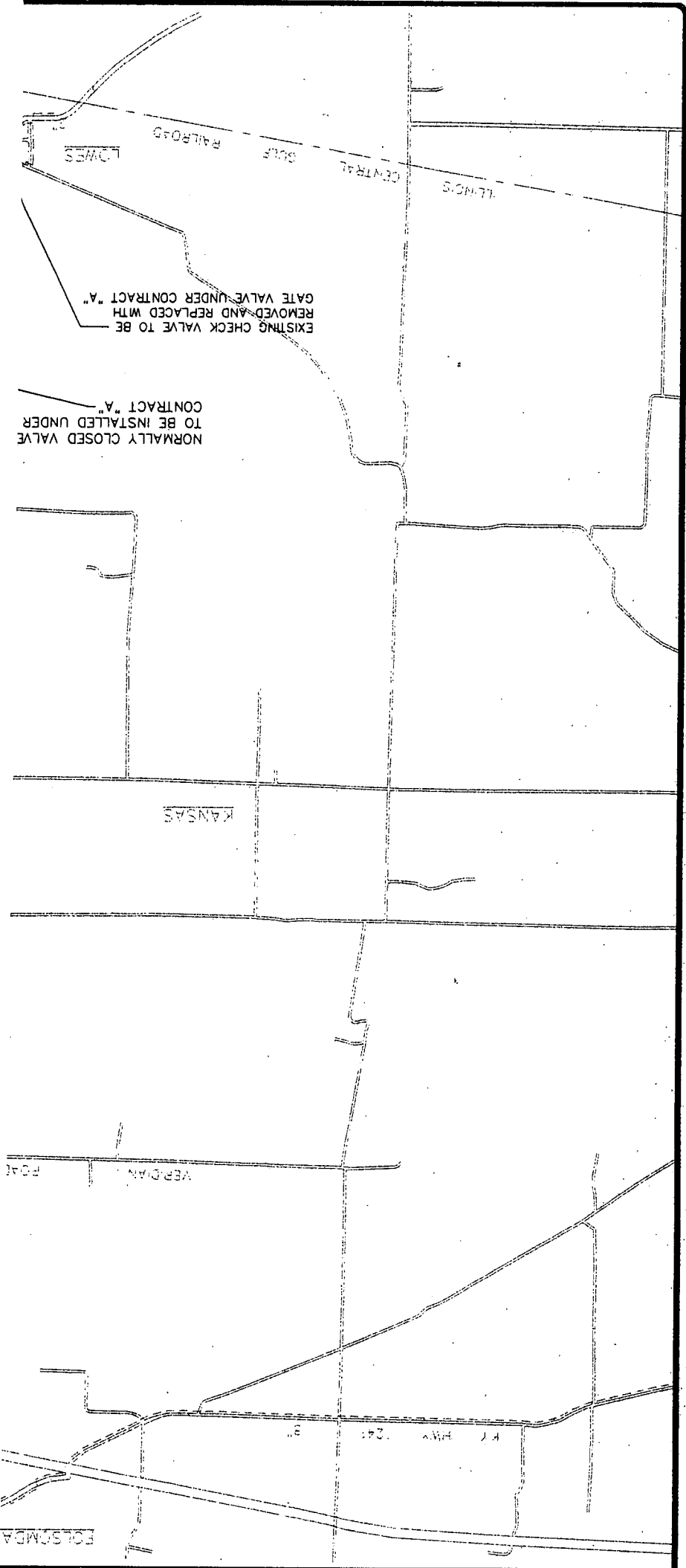
31

91

27

27





EXISTING CHECK VALVE TO BE
REMOVED AND REPLACED WITH
GATE VALVE UNDER CONTRACT "A"

NORMALLY CLOSED VALVE
TO BE INSTALLED UNDER
CONTRACT "A"

LOWESS

RAILROAD

SOUTH

CENTRAL

ILLINOIS

KANSAS

VERDIAN

POINT

R.R.

FLORIDA

RR

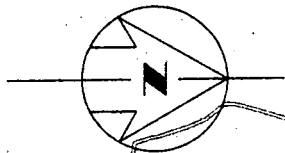
KANSAS

VERDIAN RD

FOLSOMDA

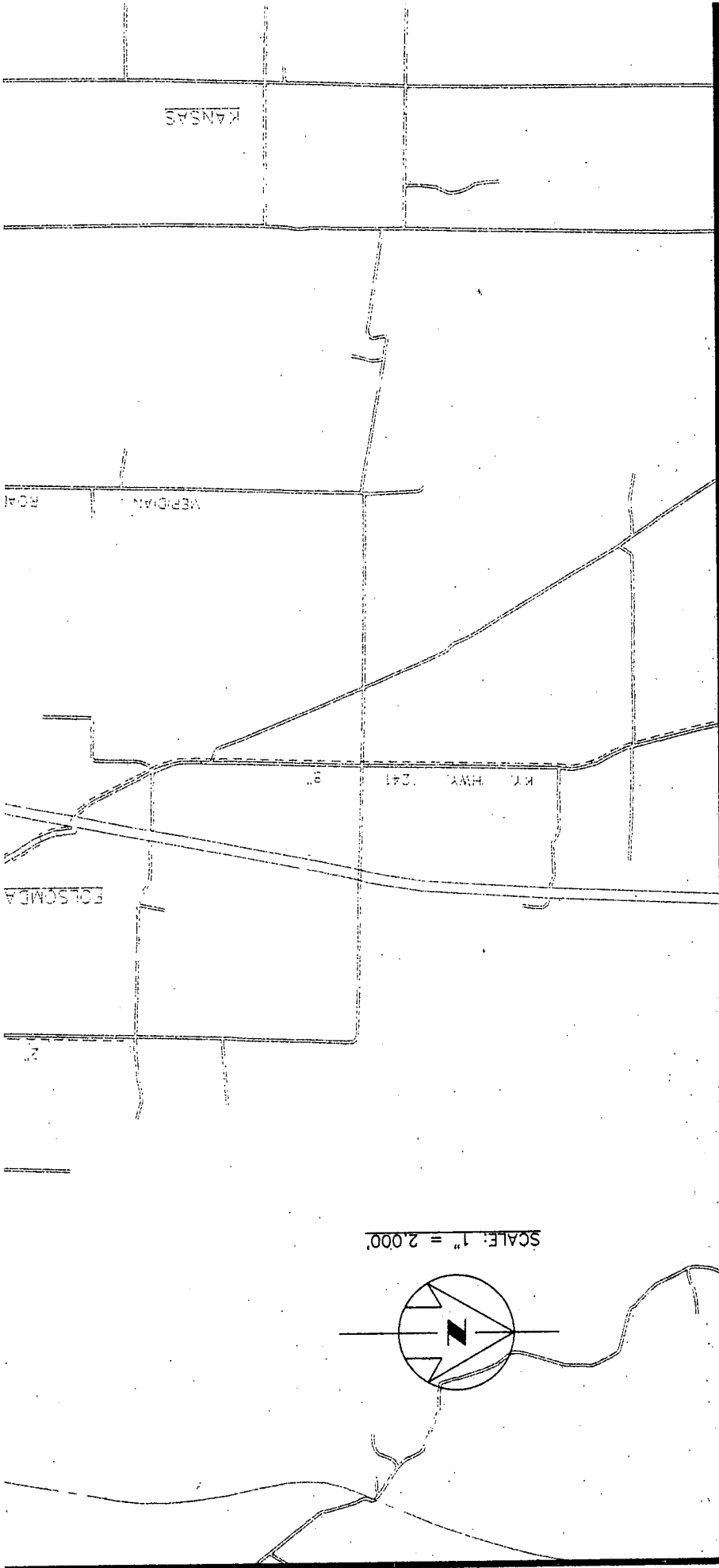
KY HWY 241

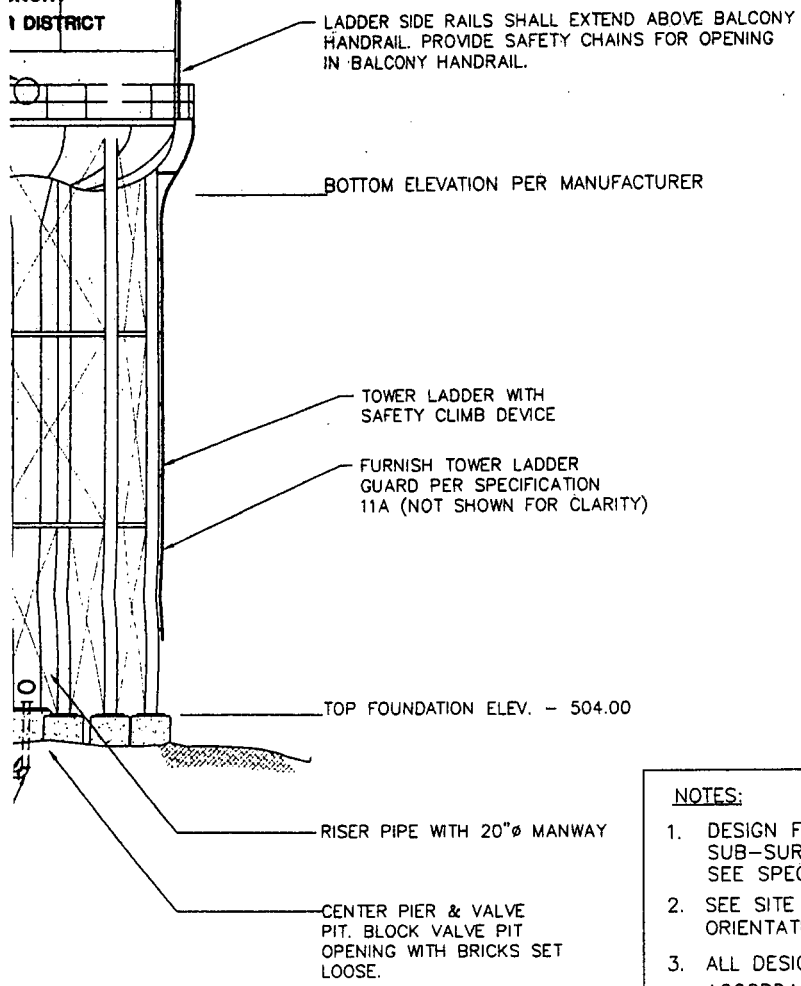
SCALE: 1" = 2,000'



PC
PA
PT

0.00

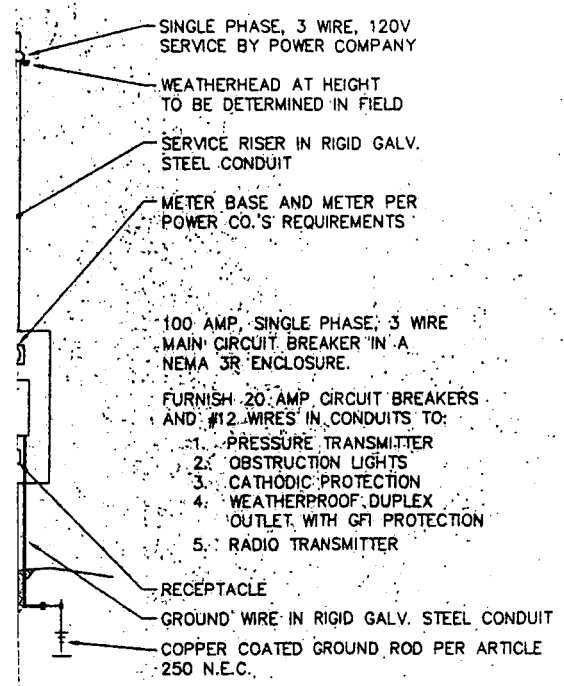




- NOTES:**
1. DESIGN FOUNDATIONS PER SUB-SURFACE INVESTIGATION. SEE SPECIFICATION 11A.
 2. SEE SITE PLAN FOR TANK ORIENTATION.
 3. ALL DESIGN SHALL BE IN ACCORDANCE WITH OSHA AND AWWA.

**ELEVATED TANK
SCHEMATIC**

N.T.S.



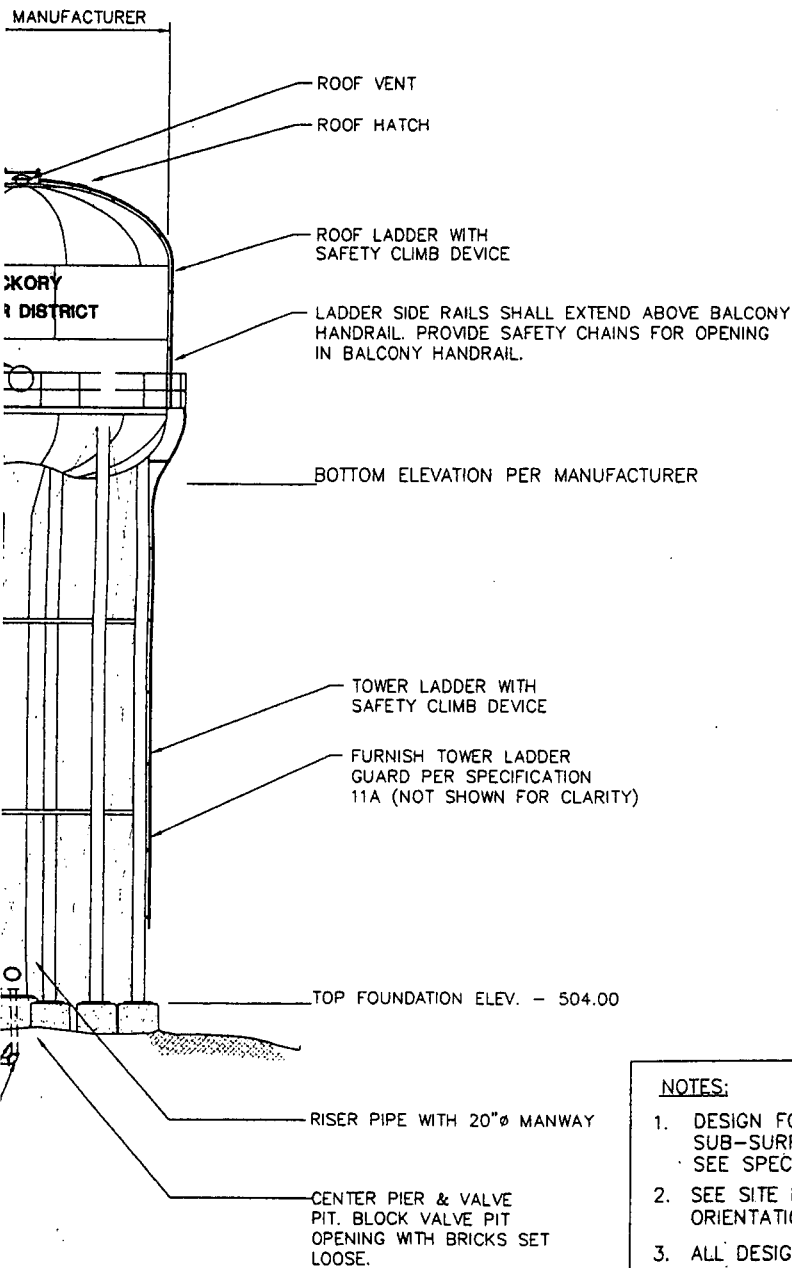
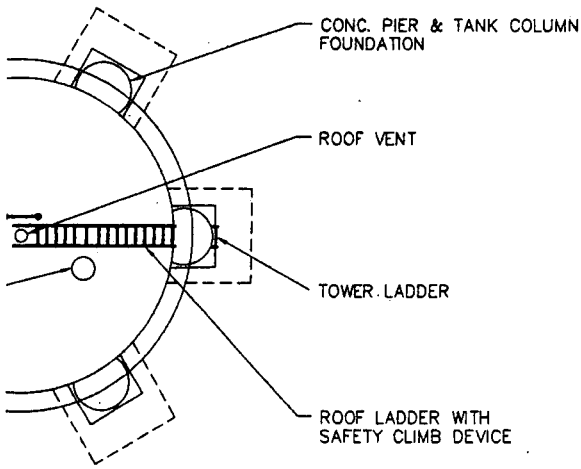
THE ONLY WORK SHOWN HERE ON TO BE THE RESPONSIBILITY OF CONTRACT "B" IS THAT RELATING TO CATHODIC PROTECTION.

SERVICE ENTRANCE POLE

N.T.S.

INDUSTRIAL PARK NO.3
ELEVATED TANK
HICKORY WATER DISTRICT

Drawn by:	JRJ
Checked by:	RHM
File:	HSI97B03
Date:	4/20/98
Revised:	N/A



N ELEVATED TANK

EMATIC

N.T.S.

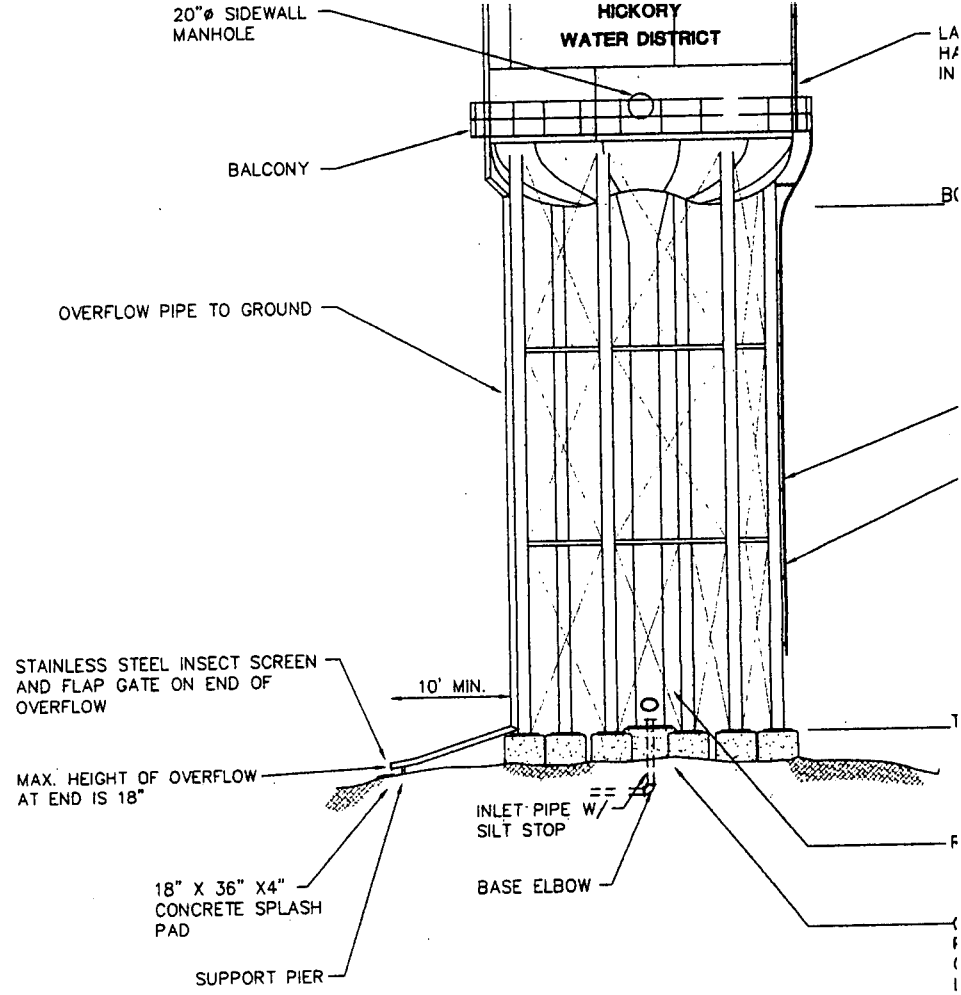
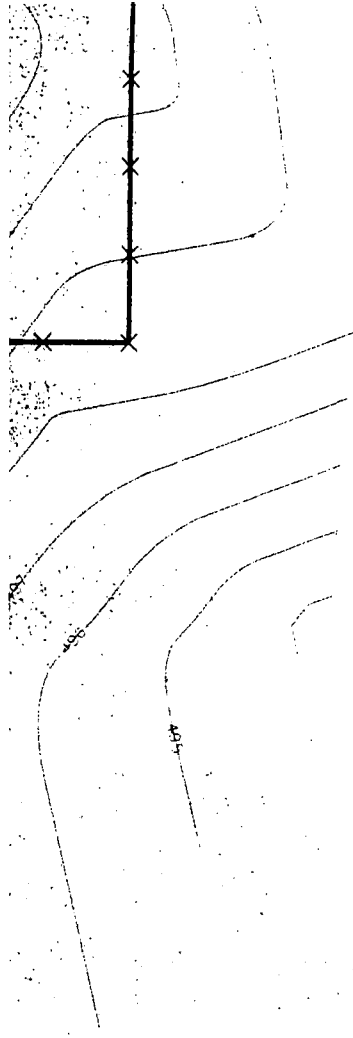
- NOTES:**
1. DESIGN FOUNDATIONS PER SUB-SURFACE INVESTIGATION. SEE SPECIFICATION 11A.
 2. SEE SITE PLAN FOR TANK ORIENTATION.
 3. ALL DESIGN SHALL BE IN ACCORDANCE WITH OSHA AND AWWA.

HUNTER MARTIN & ASSOCIATES, INC.

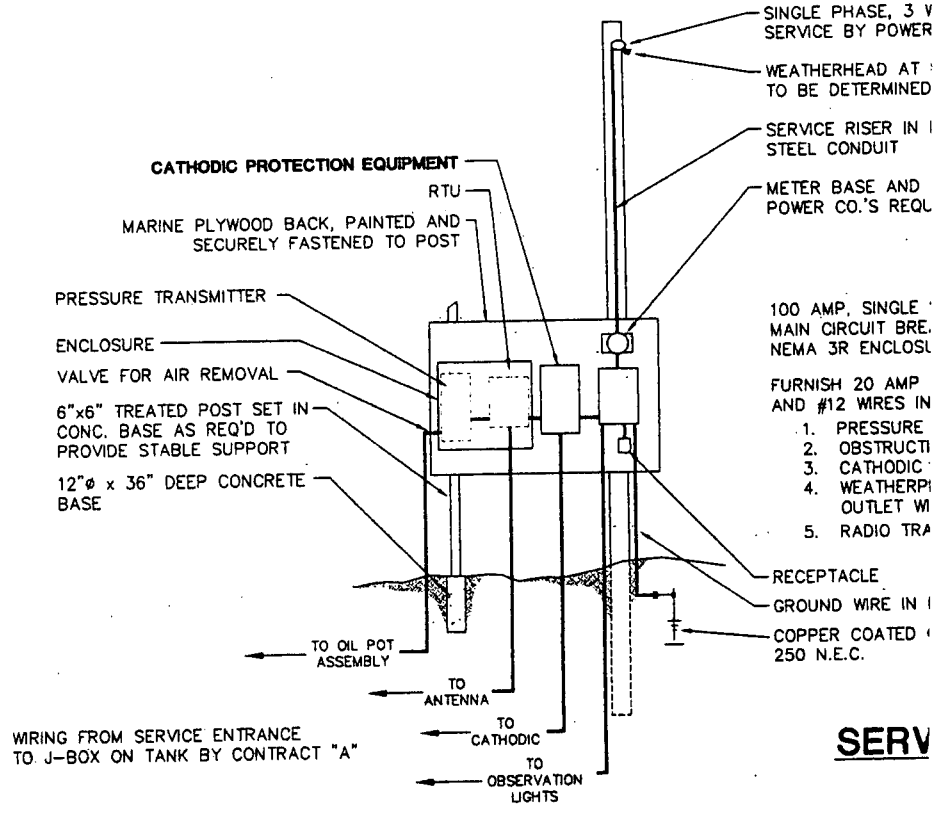
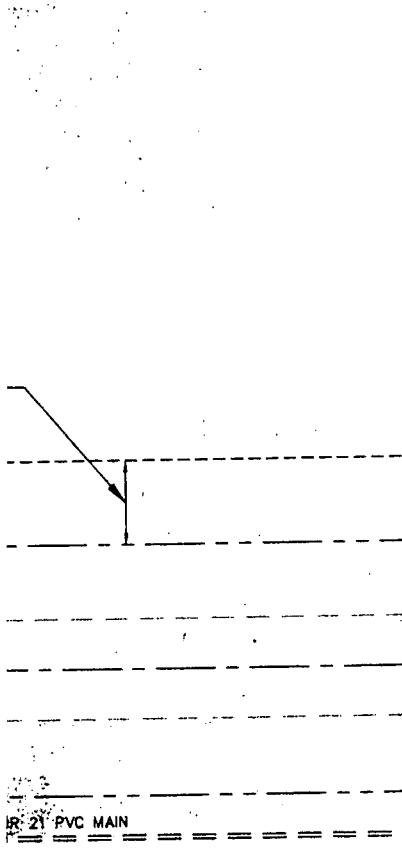


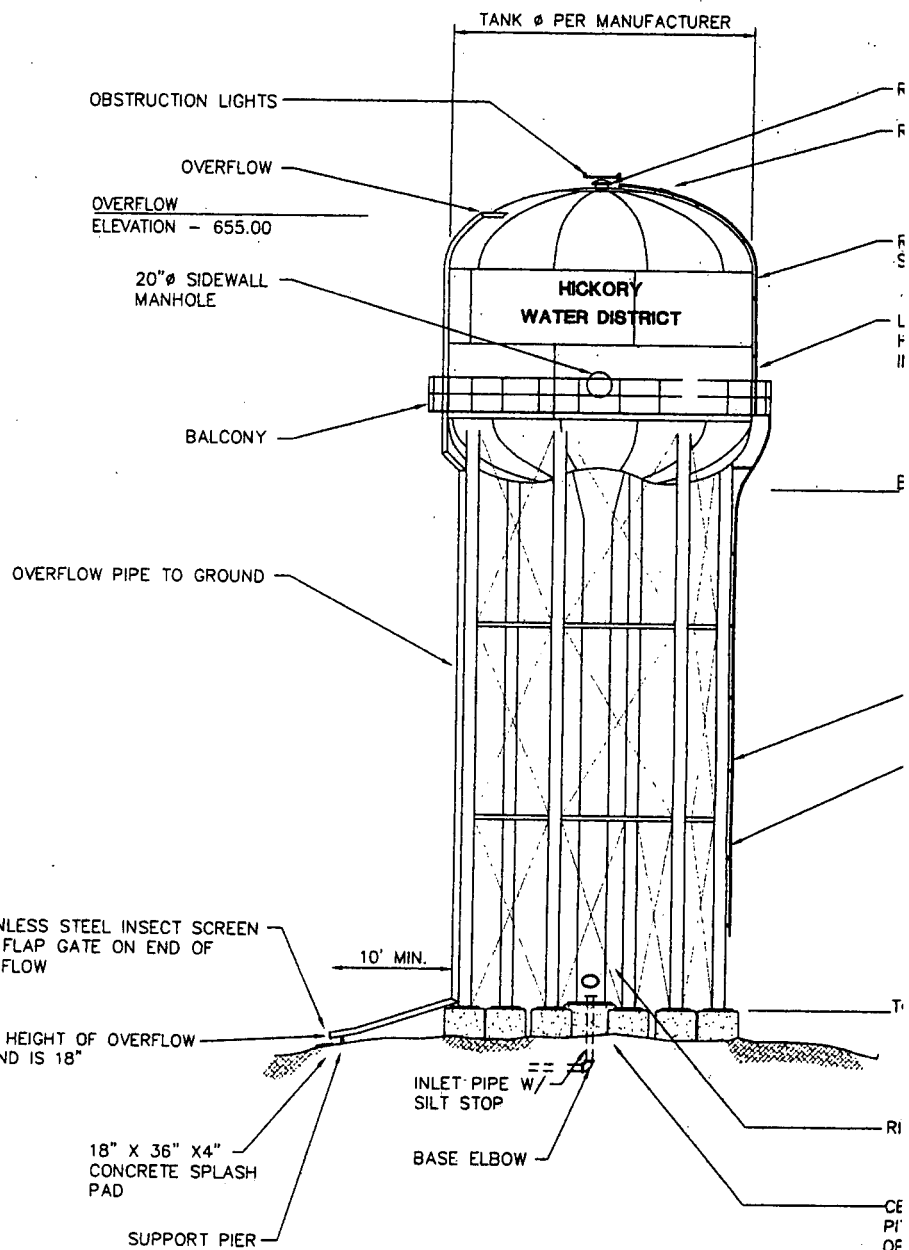
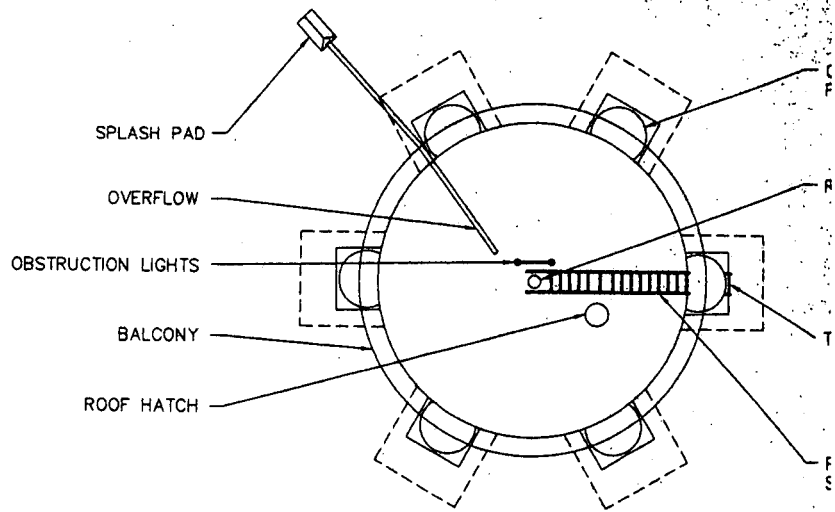
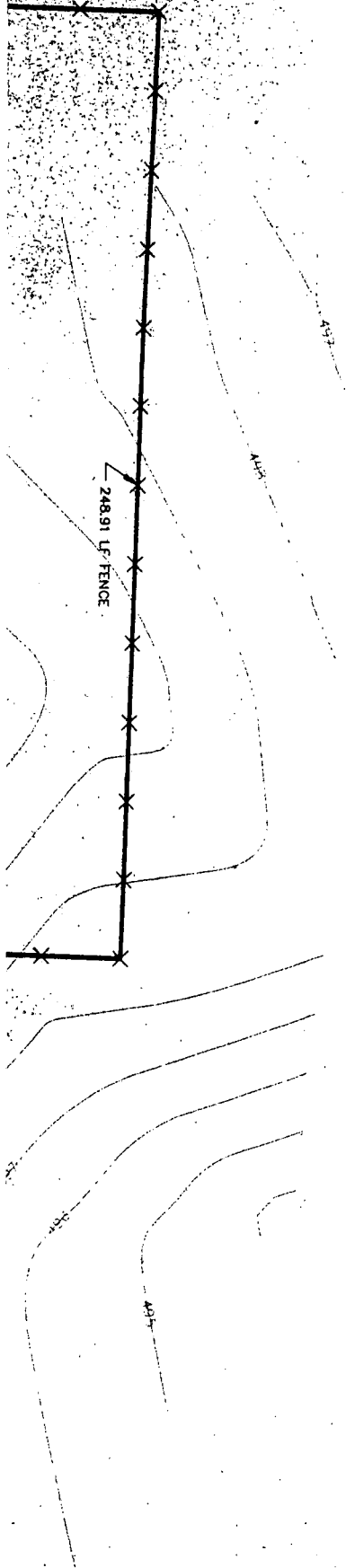
ENGINEERS & SURVEYORS
 3220 LONE PINE ROAD
 PADUCAH, KENTUCKY 42003
 (502) 534-2737 FAX (502) 534-2738

Drawn by:	JRJ
Checked by:	RHM
File:	HSI97B03
Date:	4/20/98
Revised:	N/A



500,000 GALLON ELEVATED TAN SCHEMATIC
N.T.S.

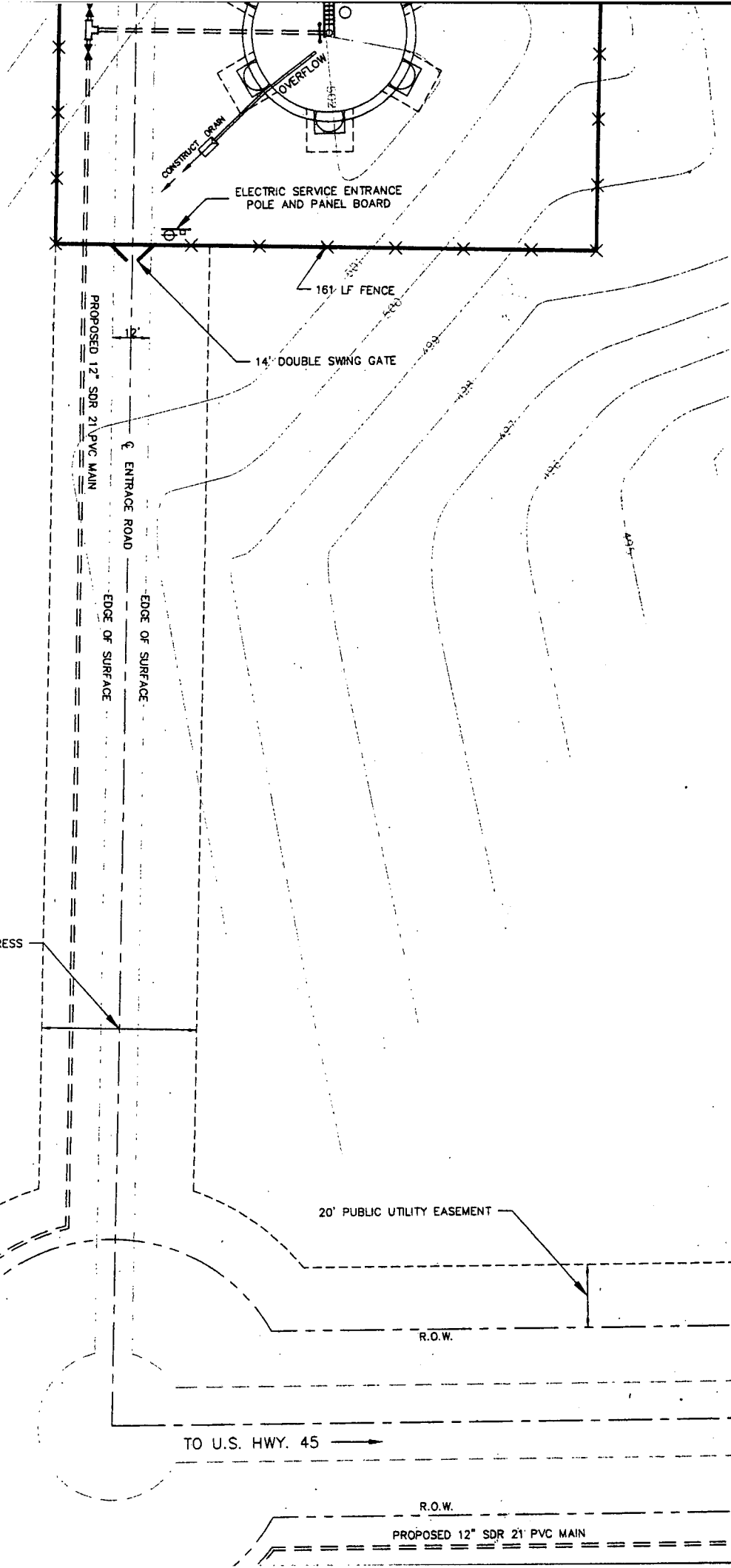
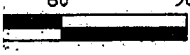




500,000 GALLON ELEVATED TANK SCHEMATIC

N.T.S.

60' 90'



N
ELEVATED TANK
10'

50' RIGHT OF INGRESS AND EGRESS

CONTRACT
IK,

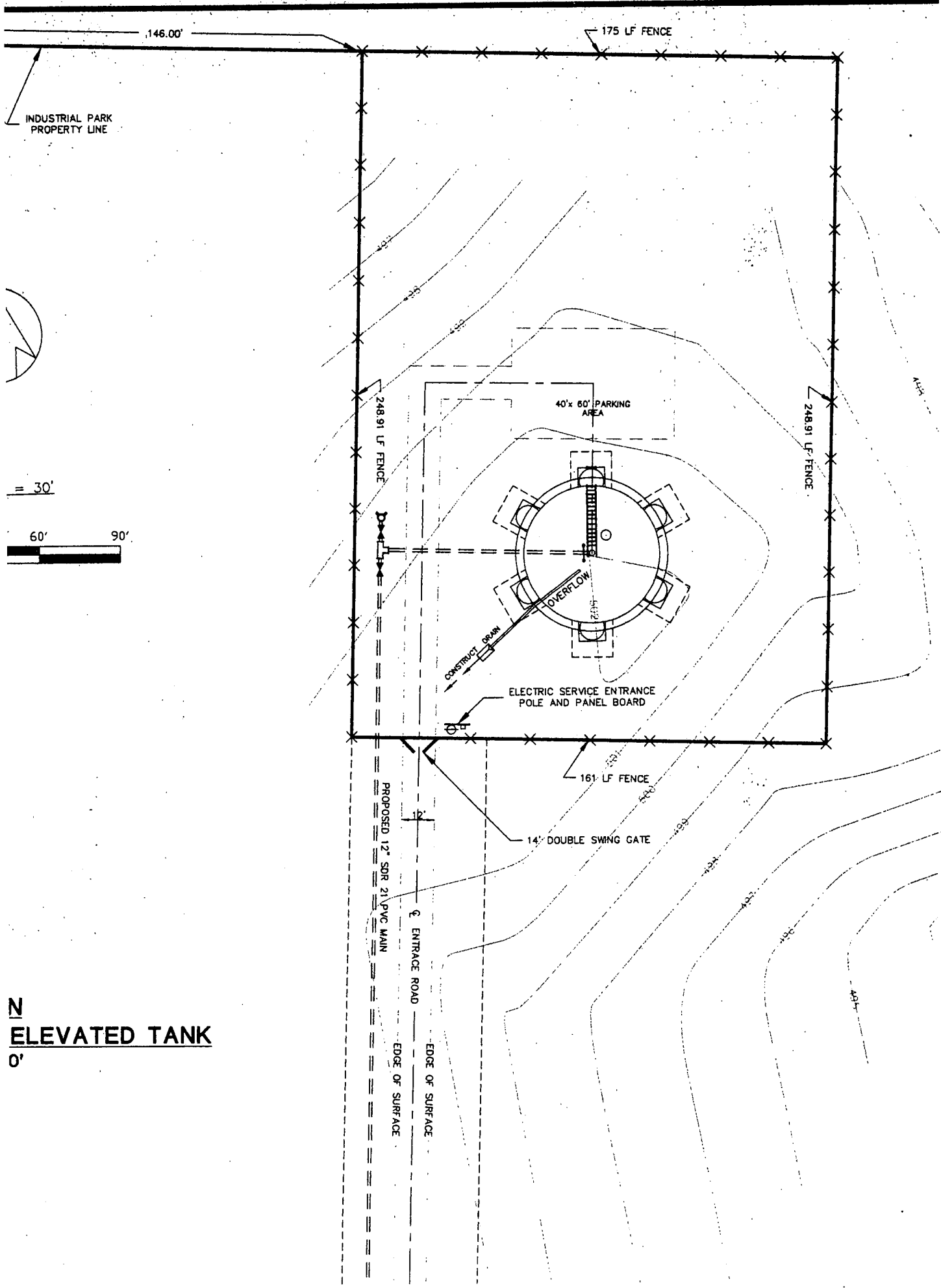
20' PUBLIC UTILITY EASEMENT

R.O.W.

TO U.S. HWY. 45

R.O.W.

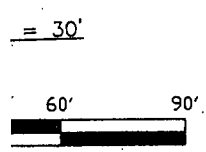
PROPOSED 12" SDR 21 PVC MAIN



146.00'

175 LF FENCE

INDUSTRIAL PARK
PROPERTY LINE



248.91 LF FENCE

40' x 60' PARKING
AREA

248.91 LF FENCE

CONSTRUCT DRAIN

OVERFLOW

ELECTRIC SERVICE ENTRANCE
POLE AND PANEL BOARD

161 LF FENCE

14' DOUBLE SWING GATE

PROPOSED 12" SDR 21 PVC MAIN

ENTRANCE ROAD

EDGE OF SURFACE

EDGE OF SURFACE

N
ELEVATED TANK
0'

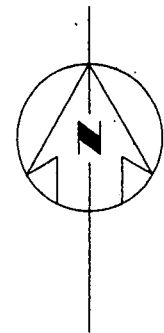
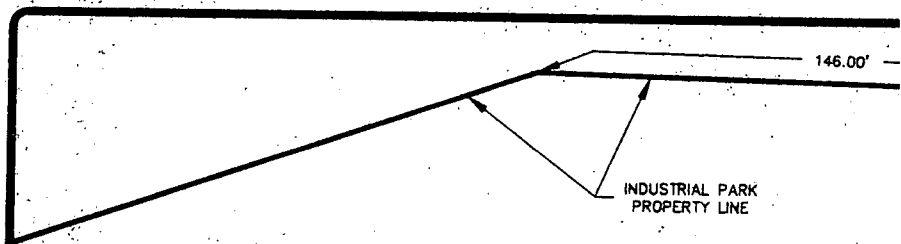


SITE PLAN
INDUSTRIAL PARK NO. 3 ELEVATED TANK
Scale: 1" = 30'

50' RIGHT OF II

NOTE:

ALL SITE WORK SHALL BE PERFORMED UNDER CONTRACT "A" WITH THE EXCEPTION OF THE ELEVATED TANK, FOUNDATIONS, TANK PIPING, BASE ELBOW, TANK ACCESSORIES, ETC. AS SPECIFIED.



SCALE 1" = 30'



SITE PLAN
INDUSTRIAL PARK NO. 3 ELEVATED TANK
Scale: 1" = 30'